DOCUMENT RESUME

ED 139 555 88 RC 009 888

AUTHOR	Snooks, Lee; Long, Daniel
TITLE	Project BACSTOP, E.S.E.A. Title III. Evaluative Report, 1975-1976.
INSTITUTION	Battle Creek Public Schools, Mich.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C. Projects to Advance Creativity in Education.
PUB DATE	9 Aug 76
NOTE	84p.
EDRS PRICE	MF-$0.83 HC-$4.67 Plus Postage.
DESCRIPTORS	*Behavior Change; *Biracial Secondary Schools; Black Students; Caucasians; Changing Attitudes; Cognitive Development; Comparative Analysis; Grade 7; Group Relations; *Interaction Process Analysis; Junior High School Students; *Outdoor Education; Program Evaluation; *Race Relations; Secondary Education; Sociometric Techniques
IDENTIFIERS	*Battle Creek School District MI; Orienteering; *Project BACSTOP

ABSTRACT

During the 1968-72 years, Northwestern Junior High School had the reputation of the "most racially troubled" junior high school in Battle Creek, Michigan. The BACSTOP (Better Acquisition of Cognitive Skills Through Outdoor Programming) was implemented to address some of the negative problems facing the school. BACSTOP aimed to: create a mechanism that would stop and reverse the racial separatism and isolation pattern that began to develop among new 7th graders entering the school each year; and improve the educational performance of 7th graders in basic skills by refocusing students, faculty and administrative attention on the school's cognitive responsibilities. Activities were designed to bring students into early contact with each other in situations requiring that they communicate with each other and work together to bring about a positive and successful experience. Four activities encompassing two days and one night were developed as the major thrust of the outdoor program (rope course; backpacking; cross country skiing, winter camping and dual solo; and a canoe trip). In addition each student was given the opportunity to sign up for one 5-day expedition in an isolated area in Northern Michigan. By the end of the 1975-76 school year, the school represented a more positive profile. There was a higher level of positive biracial interaction among 7th grade students; and rate of achievement exceeded the district rate of achievement. (NO)

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BACTOP

BETTER ACQUISITION OF COGNITIVE SKILLS
THROUGH OUTDOOR PROGRAMMING

BATTLE CREEK PUBLIC SCHOOLS
BATTLE CREEK, MICHIGAN

RC009888

Battle Creek Public Schools
Battle Creek, Michigan

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PROJECT BACSTOP

E.S.E.A. TITLE III

EVALUATIVE REPORT

1975-1976

Lee Snooks, Director
Project BACSTOP
Battle Creek Public Schools

Daniel Long
Treatment of Data

August 9, 1976

Office of Assistant Superintendent
for
Junior High Education and Research

ACKNOWLEDGEMENTS

Certain sections of this evaluation remained unchanged from the previous evaluation report of 1974-75. There was consistency during two successive years of research pertaining to format, design, and conclusions that required little to no change in some instances, thus no change was made.

Recognition is given to Neil Nelson and Bill Martin, co-evaluators of the 1974-75 evaluation report. Recognition is also given to James Knowlton, former director of Project BACSTOP for his contribution to the total evaluation effort.

Credit must be given, also, to those who made this project the success that it is, the teachers, instructors, and most of all, the students--who are BACSTOP.

FORWARD

The following pages of Chapters I and II contain essentially the same background information as contained in the 1974-75 evaluation. Readers of this evaluation will need background knowledge pertaining to conditions that were instrumental in the development of Project BACSTOP, and detailed information about the research design utilized in the 1975-76 evaluation. Thus, the first two chapters are relevant to any person who is serious in the study and evaluation of Project BACSTOP.

The major changes in Chapter I are those that update descriptions of BACSTOP activities. The 1975-76 program is different from 1974-75 in activity content and also in the total number of experiences for students. Re-scheduling and changes of program were not extensive, but did invoke new approaches in the application and administration of the 1975-76 evaluation design.

Part I of Chapter III deals entirely with Northwestern Junior High. Inferences are limited to objective interpretation of statistical results.

Part II of Chapter III deals with the control group (Southeastern) and the experimental group (Southwestern). Results of product objectives from the target group (Northwestern) is also provided to allow for approriate comparisons. Criterion levels for Product Objectives I and IV for Northwestern also apply to Southwestern. Product Objectives II and III for Southwestern are simple procedural collections of baseline data.

Chapter IV is a brief summary of the 1975-76 evaluation report.

TABLE OF CONTENTS

FORWARD

CHAPTER I	DESCRIPTION OF PROJECT	PAGE
	A. Overview	1
	B. Description of Project BACSTOP	1
	1. Needs Assessment	1
	2. The Community	2
	3. The School	3
	4. General Goals	3
	5. Activities	4
CHAPTER II	THE EVALUATION DESIGN	
	A. Introduction	8
	B. General Overview of Evaluation Problem	9
	C. The Evaluation Design	10
	1. Product Objective I	10
	2. Product Objective II	14
	3. Product Objective III	15
	4. Product Objective IV	16
	5. Process Objective I	17
CHAPTER III-PART I	EVALUATION RESULTS	
	A. Introduction	18
	B. Product Objective I	18
	1. Level of Attainment	18
	2. Answers to Evaluative Questions	18
	C. Product Objective I Data Module One	18
	D. Product Objective I Data Module Two	20
	E. Product Objective I Data Module Three	21
	F. Product Objective I Data Module Four	22
	G. Product Objective I Data Module Five	26
	H. Product Objective II Data Module One	29
	I. Product Objective III Data Module One	33
	J. Product Objective IV Data Module One	35
	K. Process Objective I Data Module One	37

PAGE

L. Parent Letter 38

M. Parent Letter 39

N. BACSTOP Schedule 40

O. Activity Descriptions 41

CHAPTER III-PART II

A. Introduction 46

1. Southwestern 46
2. Southeastern 47

B. Product Objective I 48

C. Product Objective I Data Module One 49

D. Product Objective I Data Module Two 49

E. Product Objective I Data Module Three 50

F. Product Objective I Data Module Four 51

G. Product Objective I Data Module Five 54

H. Product Objective II 55

I. Product Objective III 56

J. Product Objective IV 57

K. Summary of Chapter III 58

CHAPTER IV JUDGEMENTS OF WORTH

A. Introduction: Value of Outcomes 59

B. Relevance of Objectives to Needs 61

C. Limitations of the Study 62

APPENDIX

A. Sociogram 63

B. Map Used for People Path 64

C. Activity Voluntary Interaction Checklist 65

D. Sample Bus Plan Used to Quantify Photographic Data 66

E. Cafeteria Map Used to Quantify Photographic Data 67

PAGE

F. Library Observation Checklist Used to Quantify Photographic Data 68

G. Memo Regarding Racially Related Referrals 69

H. Referral Blank 70

I. C.A.T. Correlated T-Tests 71

LIST OF TABLES

TABLE		PAGE
III-1	Percent of Students Making at Least One Biracial Choice in a Hypothetical Questionnaire Situation	19
III-2	Percent of Maximum Possible Biracial Interaction Achieved in a Real Task	21
III-3	Percent of Possible Biracial Interaction Achieved in a Neutral Task	22
III-4	Percent of Possible Biracial Interaction Which Was Actually Achieved in Four Major BACSTOP Activities	24
III-5	Percent of Possible Biracial Interaction Which Was Actually Achieved in Four Major BACSTOP Activities	25
III-6	Percent of Biracial Interaction Achieved in Four Major BACSTOP Activities	26
III-7	Extent of Biracial Interaction in the Cafeteria by Month and by Lunch Period; at Northwestern in 1975-76	27
III-8	Yearly Totals of Biracial Interaction in the Cafeteria Reported by Section; at Northwestern in 1975-76	27
III-9	Relative Violence Levels of the Four Junior High Schools in Battle Creek, 1975-76, Based on Selected Suspension Criteria From Grades 7 through 9	30
III-10	Actual Content of Violent Incidents in the Seventh Grade at Northwestern in 1975-76	30
III-11	Comparisons of Yearly Totals at Northwestern in 1975-76, of Violent Incidents Having Two Races Involved	30
III-12	Decrease in Violent Incidents Having Biracial Participants; 1971-72 as a Baseline	31
III-13	Decrease in Violent Incidents Having Biracial Participants; Year by Year	31
III-14	Analysis of Two-Race Incidents	31
III-15	Number of Biracial Incidents Leading to More Than Two Students Involvement at the Seventh Grade Level	34
III-16	Number of Biracial Incidents Leading to More Than Two Students Involvement at all Grade Levels	34
III-17	Rate of Gain in Academic Growth in Seventh Grade Over Seven Month Period	35
III-18	Percent Attendance in Regular Two-Day Activities	37

TABLE		PAGE
III-19	Percent of Students Making at Least One Biracial Choice in a Hypothetical Questionnaire Situation; Results From All Three Junior High Schools	49
III-20	Percent of Maximum Possible Biracial Interaction Achieved in a Real Task; Results of all Three Junior High Schools	50
III-21	Percent of Possible Biracial Interaction Achieved in a Neutral Task; Results of all Three Junior High Schools	51
III-22	Percent of Possible Biracial Interaction Which Was Actually Achieved in Four Major BACSTOP Activities at Northwestern and Southwestern	52
III-23	Percent of Possible Biracial Interaction Which Was Actually Achieved in Four Major BACSTOP Activities at Northwestern and Southwestern	53
III-24	Percent of Biracial Interaction in the Cafeterias of Northwestern and Southwestern	54
III-25	Actual Content of Violent Incidents at all Three Junior High Schools	55
III-26	Rate of Gain in Academic Growth at all Three Junior High Schools	57

CHAPTER ONE

DESCRIPTION OF PROJECT

OVERVIEW

The Battle Creek School District has used its extensive outdoor education experience and staff to develop and test some notions about effecting some positive changes in interracial interaction among seventh grade students in the most racially troubled junior high school in the system.

The concept was to develop a series of structured experiences in a variety of wilderness settings which would bring students of different races together in stressful adventure activities designed to promote interaction, communication and cooperation among participating students.

DESCRIPTION OF PROJECT BACSTOP

I. Needs Assessment

A starting point. As whites and blacks within the seven elementary feeder schools for Northwestern Junior High School move from those individual schools to one large junior high school, the acceptance of whites for blacks and blacks for whites has historically dissolved into a condition of racial separatism and isolation among groups of students who formerly associated freely with each other.

This condition within the school had a significant negative impact on the school's ability to develop cognitive skills within these incoming seventh grade students. Diversionary attitudes and energies generated by this racial conflict had led to:

A. days when the faculty and administration devoted their time to "just keeping the lid on." Little or no instruction occurred on these days.

B. teachers becoming unwillingly committed to or isolated from groups of students by virtue of the teacher's attitudes toward student feelings.

C. the instructional leadership (administration) becoming preoccupied with "keeping the lid on", rather than concentrating on those activities that would upgrade the instructional program within the building.

D. students themselves being preoccupied with shakedowns, assaults, racial slurs and other kinds of conflict occurring both in and out of the classroom.

E. a high rate of student absenteeism by students who saw staying away from school as the only way to avoid unpleasant confrontation.

F. parental perception of the school as a "racial battleground", rather than a place of educational opportunity for their children.

The belief that these conditions were affecting cognitive development among students at Northwestern Junior High School was further supported by low test scores on the Michigan State Assessment Test for seventh grade students in the school.

II. The Community

Northwestern Junior High School is geographically located between two disparate residential populations. The areas to the south, east and north of the school are heavily black and reflect a lower middle class to upper lower class socio-economic group. They occupy approximately three square miles. Within sight of Northwestern is a federally subsidized apartment complex for low income families. There are seldom any white families in this complex, due to the extreme pressures they have been subjected to by the other residents. Several units in this complex remain vacant, because the complex has been the site of many disturbances, and association with it carries a strong social stigma. It is viewed by some members of the community as a black stronghold. Another federally subsidized apartment complex is located approximately one-fourth of a mile from the school. It exists as an island with no real neighborhood at its borders. It is predominately black, with a small number of white families. It has been periodically the site of racial tension, but not with regularity.

The majority of the area is occupied by single family homes which are reasonably well maintained. The presence of homes converted to multiple family dwellings is more than occasional, but apartment buildings per se are few. Where these apartment buildings exist, they are unattractive and in poor condition. The neighborhoods in which they are located show the lack of care.

The area to the west of Northwestern is heavily white and reflects a broad middle class socio-economic background. It extends five miles from the school beyond the northwestern limit of the city and includes approximately eleven and one-half square miles, sections of which are more rural than urban. Some of these sections are integrated in varying degrees. The more populated general urban area which makes up the majority of the white residential population is referred to as Urbandale and is considered by some as a white stronghold.

The homes are mostly single family dwellings and reflect the full breadth of the middle class socio-economic strata. There are several concentrations of homes which reflect upper middle class criteria, several concentrations which reflect lower middle class criteria, and the larger remainder which is essentially middle-middle in make-up.

Black families living within the predominately white residential area are there by choice, and seem to be accepted by their neighbors. The white families living within the predominately black residential

area are usually long-time residents who have seen their neighborhood change from all white to nearly all black. In these cases, their children are beyond school age. The few white families with school age children, living in the predominately black areas, have experienced isolation from their neighbors, and their children have invariably been the targets of overt aggression.

III. The School

Northwestern, with 780 students is the largest of the four junior high schools in Battle Creek. The student population is 55% white and 45% black. Only five students come from Spanish American or American Indian backgrounds. These students are of mixed heritage and are assimilated by the white majority. Approximately 25% of Northwestern students come from economically disadvantaged homes and receive federally subsidized lunches and other benefits through private, local funding sources. Approximately 39% of Northwestern students score sufficiently below grade level as to qualify for Title I assistance.

During the 1968-1972 years, Northwestern acquired the reputation as the "most racially troubled" junior high school in Battle Creek. Racial conflict was an expected problem to be dealt with sometimes on a daily basis. Students harassed each other and took sides always along color lines, and students harassed teachers, counselors, administrators, using accusations of prejudice as their main theme. Fights between individuals of opposite color were common and frequent, often snowballing into group hostilities which totally disrupted the educative process. At times, classes were suspended as students were simply contained in classrooms during times of tension. Certain times during the school year were more violent than others. Each Friday was a day of high potential trouble and the days preceding the traditional vacations, Thanksgiving, Christmas, Spring Break and the end of the school year, were almost certain to be accompanied by individual and group action. Tuesdays seemed to be troublesome days and October was characteristically an uneasy month.

IV. General Goals

It was hoped that as the project developed, momentum toward a total school response would occur. That is, as each seventh grade participated in the BACSTOP activities and advanced to the eighth and then the ninth grades, the impact of the emphasis on an improved racial climate would create the expectation of harmony rather than that of dissonance.

Two major goals were identified:

A. To create a mechanism that would stop and reverse the racial separatism and isolation pattern that began to develop among new seventh grade students entering Northwestern Junior High School each year.

B. To improve the educational performance of seventh grade students in basic skills by refocusing students, faculty and adminstrative attention on the cognitive responsibilities of the school.

Several operational subgoals were identified that would hopefully reduce racial tension in the school, freeing students, faculty and administration to concentrate on improving cognitive growth. Among these goals are:

A. More opportunity within the school setting must be provided to create understanding, trust and knowledge of others; including faculty-faculty, student-student and student-faculty relations.

B. More opportunity for "physical togetherness" as a basis for creating commonality of experience and communications for a purpose.

C. Creating a setting where students and faculty have a personal-felt need to know each other and communicate with each other.

D. Creating a setting where human sensitivity, compassion and responsibility for others is actively cultivated by the design of the educational leadership in the school.

V. Activities

All activities were designed to bring students into early contact with each other in situations requiring that they communicate with each other and work together to bring about a positive and successful experience. It was anticipated that these dynamics would carry over into the regular school program when students returned to their ongoing educational activities.

Four activities were developed as the major thrust of the outdoor program, each activity encompassing two days and one night. All overnight sessions were held in the out-of-doors at various locations used for the individual BACSTOP activities. In addition, each student was given the opportunity to sign up for one five day activity if he/she wished. If a student participated in all activities, he/she would experience thirteen days in the out-of-doors.

Each activity was designed to accomplish specific objectives relating to the overall goals of the project. For each activity students were assigned to integrated patrols of ten or fewer members. The proportion of minority/majority assignment was dependent upon the numbers of blacks and whites participating in each activity. Groups were formed using the social studies classes at Northwestern as the source. A breakdown of black and white males and females in these classes led to the assignment of which students would comprise a group. For example, the ideal girls group would number between 27-32 girls with 9-12 blacks and 18-20 whites. This balance was achieved by combining the girls from two or three social studies classes into one group which remained the same throughout the school year. It was from these groups that the patrols were formed, each patrol reflecting a pro-

portionate number of blacks and whites actually present for the activity. In some rare instances, there were an unusually low number of participants from one or the other racial populations. When this occurred, some patrols were not integrated. This was done to insure that the minority students were not totally isolated among a majority patrol, and to enhance the quality of the interaction among the members of the patrols. It was discovered that fewer than three members of either race could not function effectively in a patrol situation without feeling outnumbered and overwhelmed. Unfortunately, there were times when there were patrols which were not integrated. On these occasions, patrol leaders emphasized the objectives of BACSTOP on a cognitive, but more abstract level.

The ropes course, wall and beam and climbing barn comprise the first two-day BACSTOP activity. The ropes course is a series of physical and mental challenges to be performed by individuals with the assistance of two or three other students from their patrols. These working sub-groups are integrated by the patrol leaders. The members of the sub-group are responsible for assisting each other in the performance of the tasks encountered, and each member has his/her turn on the obstacles on the ropes course. The performer must at times trust his/her physical safety to those students who are assisting him/her. The nature of the tasks to be performed is one of adventure and reasonable stress. At times, students are as high as thirty feet off the ground. In cases like these, safety lines assure that no student can fall to the ground. In the ropes course, students learn to trust each other and to be responsible for each other. An expected natural consequence of real stress and real responsibility is the spontaneous support and encouragement freely given among members of the sub-groups. There is only one patrol on the ropes course at any given time. Three adults trained to supervise these activities are always present with each student patrol.

The wall and beam are obstacles in the truest sense. The wall is a twelve foot vertical plane, and the beam is a log, lashed to two trees. It is seven feet off the ground. The purpose of these obstacles is to demonstrate that students can accomplish more by working together, than by working alone. Each patrol is given the assignment of getting all members over the wall and beam, with the restriction that once over a patrol member may not assist in any way, except to prevent others from falling. In attempting these tasks, the patrol is involved in a common challenge. There is no success for an individual because no seventh grade student working alone can even approximate getting over the obstacles unassisted. As a patrol devises its plan and attempts to carry it out, members enter into a physical relationship which is based upon a mental disregard for color. Essentially, separate individuals become a group as the patrol lends itself to the common goal. Two adults supervise each patrol as it meets these obstacles. There is a conscious de-emphasis on the length of time a patrol might require on the wall and beam. The emphasis is on group interaction and effort which may lead to success in overcoming these obstacles. Man-made climbing walls, that utilize the already existing superstructure of a very large barn, comprise the third component of the first session. Each patrol, regardless of existing weather conditions, can further enhance the concepts of interaction by climbing, rappelling, traversing and belaying, as a group involved in a highly

adventurous activity. The climbing barn further promotes trust among patrol members as each student takes his/her turn at belaying fellow climbers. As in other BACSTOP activities, there is always a minimum of two trained instructors, who provide instruction and counseling. It is the main purpose of the climbing barn to provide yet another source for the break-down of student polarization. Another added benefit is the very definite enhancement of self-concepts as individuals succeed in reaching the top and overcome initial fears.

During this first activity, students are taught the basics of outdoor living. They become familiar with the equipment they will use while living outside. Students are taught the safe use of such things as a cookstove, or a campfire, and the proper use of their tents, packs, sleeping bags, utensils and rain gear, if necessary. Throughout the entire year, there is an emphasis on an environmental ethic of respect for all of nature.

The second two-day BACSTOP activity is backpacking. After the initial patrol business, students are taught the basics of the use of maps and compass and then transported to a nearby forest where they are instructed to follow a compass bearing to a previously established campsite. Students are then left to work as a patrol in negotiating the course they have been given. Patrol leaders sometimes follow at a reasonable distance without the knowledge of the patrol, and sometimes accompany the patrol without giving assistance. It is the purpose of this activity to create a real situation in which the patrol must work together to achieve the desired goal of reaching their destination. This activity is frequently performed in cold weather and snow. Careful instruction in cold weather camping is provided by the patrol leaders prior to departure, and close supervision is given as camp is established. The added stress of inclement weather intensifies this experience and the pride of accomplishment often becomes clearly evident. Two adults accompany each patrol.

By the third two-day activity it is hoped that there will be a reasonably heavy ground cover of snow. The activities are cross country skiing, winter camping and dual solo. Although no additional instruction in cold weather camping is given formally, each student is checked periodically to insure that he/she will not experience unusual or undue discomfort from the conditions encountered. By the time this activity occurs, students are participating becasue of a sincere dedication to BACSTOP and its goals. The emphasis on skiis is in having fun together. The emphasis of dual solos is communication and sharing at a personal level.

To facilitate this more personal one-on-one communicative process, one black and one white student share a tent and campsite apart from the rest of the patrol. Each pair of students thus spends approximately fifteen to twenty hours together, and their only contact with other people is the periodic inspection by roving instructors. Apart from the more obvious advantage of two students working together, conversation becomes the only form of entertainment when all else is done, thus enhancing students perception and knowledge of each other. This portion of the experience is designed to permit students to experience

only themselves and one other person for an extended period of time, under circumstances in which they need each other.

The fourth activity experienced by a BACSTOP student is a two-day canoe trip on a nearby river. After the initial patrol assignments, the patrol selection of provisions and the issuing of gear, students are assigned to a canoe on an integrated basis. A student's canoe partner may not be the same as his tent partner, and these partners may not be the same as the sub-group members who work together on the variety of tasks which must be carried out during the course of the expedition. The purpose of this activity is to bring students into contact with others in close working relationships which require cooperation and teamwork. Students are given no further instruction in outdoor living, but must rely on the lessons of their first experiences. Minimal instruction concerning the operation of a canoe is given, so that the real learning and coordination is gained on the river. Full life jackets are required at all times on the river, and two adults are with each patrol.

Between the third and fourth two-day activities, there is a period of several weeks. During this time, students could sign up for a five-day expedition in an isolated area in Northern Michigan during January, February, March and April. The emphasis on the week-long trip is in working as a patrol to have a successful experience, despite the physical hardships and the mental challenges encountered. The winter wilderness trip requires that students carry all of their gear in backpacks to an isolated cabin which is their home for three days. During this week, the patrols explore many acres of wilderness as they travel up to thirty miles on cross-country skiis. They find only primitive conditions in their cabins; no electricity, no running water and no heat other than a fireplace and woodburning stove, which is also used for cooking. There is a pump and out-house located near each cabin. Patrol members must work closely together, each person having responsibilities to carry out for the entire patrol. The physical exertion is sometimes great. During this activity, with their everyday defenses down, students tend to establish genuine relationships rather than acquaintanceships.

Throughout participation in the above activities, students are brought into intense and real contact with their peers. Through these experiences, BACSTOP attempts to transform young human beings into young humans becoming.

CHAPTER TWO

THE EVALUATION DESIGN

INTRODUCTION

The evaluation team that produced the 1974-75 BACSTOP evaluation concluded their findings with several recommendations. In applying this design for the 1975-76 effort to validate Project BACSTOP it was felt that most recommendations should be implemented, so that stronger inferences could be made and with more credibility. While it was not economically nor logistically possible to respond to all recommendations in their entirety, most suggestions were dealt with in the 1975-1976 evaluation. The following paragraphs contain last year's evaluation team's recommendations (underlined) and responses.

> Evaluation design should precede implementation. Utilizing the 1974-1975 design, early funding and implementation made this suggestion possible for the 1975-1976 evaluation effort.
>
> A year is not enough. Utilizing the 1974-75 design for the succeeding year (1975-1976) has allowed for a more viable longitudinal study.
>
> Students associate with friends who are in turn neighbors. Last year's evaluation suggested that additional studies should be undertaken to determine if segregated neighborhoods were depressing biracial interaction in the school. Lack of funds and staff made this further addition of research impossible.
>
> Attitude tests may be useable. Again, it was felt that the time needed to select, test and administer attitude tests did not sufficiently warrant inclusion in the 1975-76 evaluation effort.
>
> Other schools should be assessed. This recommendation received much attention in our effort to further the credibility of the original evaluation design. BACSTOP programming and the 1974-1975 evaluation design was transported to an additional junior high school (Southwestern) in Battle Creek. Also, another junior high school (Southeastern) became the control school, thus allowing for a comparison study by collecting baseline data from Southwestern and Southeastern. Though it might be possible to make some inferences by comparing the 1975-1976 evaluation results of Northwestern, with that of the other two schools, it is not our intent to do so. Such comparisons would be subject to many variables that would make any conclusions marginal at best. In implementing the recommendations of the 1974-1975 evaluation team, it was our intent to program and test two additional schools for the purpose of collecting baseline data. Contrasting differences in school personnel, racial attitudes, student socio-economic backgrounds and length of BACSTOP programming would further complicate and invalidate statistical comparison.

True experimentation is possible, if not practical. It was felt that including two additional schools would satisfy most criteria for a true experimental design. Southwestern and Southeastern would serve as BACSTOP and non-BACSTOP treatment groups.

The following evaluation design was developed and implemented in 1974-1975 at Northwestern Junior High School. It is re-written with only minor changes that would otherwise limit this design to Northwestern and the 1974-1975 school year. Changes reflect refinement in data collecting, administration and scheduling of the evaluation itself.

GENERAL OVERVIEW OF THE EVALUATION PROBLEM

The initiators of the program realized at the outset that evaluation would be both highly important and quite complicated. It required the development of measurement techniques which would sensitively chart the changes in the ways that students related to each other and to the school. This is essentially a sociological problem of describing and explaining human behavior. Ultimately, of course, change in student behavior was what the program sought to produce. For that reason, the evaluation design has consistently sought to directly measure the behavior of students as it occurred in school and on trips, rather than rely upon second-hand reports of behavior or on hypothetical statements about how someone might behave in certain circumstances.

This means that surveys of attitudes were not included in the evaluation design. It was felt that attitude measures conducted to gain information about such socially sensitive issues as racial relationships are subject to considerable error. There are understandable reasons for such errors. On such issues there are fairly clear and socially approved points of view. Knowing these, people often report one type of behavior, but engage in another. Furthermore, there is a tendency for people interviewed to provide the researchers with information that enhances the self-image of the informant and simultaneously pleases the data gatherer. People may sincerely wish or believe that certain behaviors are occurring, and report that they are. But in the final analysis, such reports may be verified only by direct observation of events.

To avoid these problems, this evaluation model has consistently sought to anchor its data and analysis to directly observed behavior. This has added strength to the research design, but raised additional problems characteristically encountered in social science research. Ideally, the best way to observe the interaction among people would be to have trained observers present at all places, at all times, when black and white students were together. Such a technique, called participant observation, is used widely in research situations, and its findings possess high validity and unusual sensitivity. Unfortunately, such data gathering and evaluation is extremely expensive and time-consuming to conduct. What was needed was a system to observe biracial student behavior which overcame these problems. It needed to sensitively monitor that behavior at regular and controlled intervals, at relatively little cost, using a small number of trained investigators. Such a plan would have to address itself to four major areas of inquiry:

What was the extent of positive biracial interaction between seventh grade students?

What was the extent of negative biracial interaction between seventh grade students?

What were the nature and number of negative biracial incidents which involved larger groups of opposite race students, i.e., "snowballing" incidents which occurred?

What was the nature of academic achievement among seventh grade students?

Each of these areas of inquiry raised further questions about how the design would be developed and implemented. Of particular difficulty were the questions which dealt with biracial interaction:

Which types of situations would allow inferences to be drawn about the nature and extent of biracial interaction?

How often should each situation be monitored to gather data?

How many measures of biracial interaction would allow inferences to be reasonably drawn about the overall level of interaction?

These questions were formulated during the late summer of 1974 by a team of cooperating university persons, administrators from the Battle Creek Public Schools, representatives from the Michigan Department of Education and the Director of Project BACSTOP. Over a period of several weeks, beginning in August 1974, the evaluation design was developed and refined. Measurement devices were designed and pilot tested, criteria for success were established, data schedules made, and techniques for analysis were agreed upon. Formal implementation of the evaluation design occurred in October, 1974 and for the present year in September of 1975.

THE EVALUATION DESIGN

I. Product Objective I

"Seventh grade students will display an increased level of positive biracial interaction with members of the opposite race throughout the school year."

Determining the level of positive biracial interaction was not a clearly or easily defined problem. It was suspected that students would interact differently in different situations. Interaction might vary when teachers were present or not present. It might vary when students were engaged in voluntary social interaction as opposed to involvement in academic tasks. It might vary considerably when students were in school or engaging in planned outdoor activities which were part of the BACSTOP program. No single system of observation of behavior would reveal the nature of biracial interaction in all of these different situations. Consequently, the evaluation was designed to include several types of observations, in several types of situations, in which stu-

dents were together. With sufficient number of types of behavioral observations, it would be possible, in theory at least, to infer the general nature of biracial interaction with a reasonable degree of confidence. It was decided to observe five different types of situations in which students would or could interact biracially:

> A situation in which students were to make a choice of a hypothetical partner to engage in several diverse hypothetical activities. This was to be measured with a sociogram.
>
> A situation in which students were required to actually choose another student to work with on a real academic task under direct teacher supervision. This was to be measured with an observation checklist.
>
> A situation in which students were actually required to sit next to another student in an informal academic situation, under indirect supervision by a teacher. This also was to be measured with an observation checklist.
>
> A series of non-academic situations connected with the outdoor activities in which students could voluntarily interact, with whom they wished, under indirect teacher supervision. This was to be measured with a series of systematically taken photographs.
>
> A non-academic, social situation in which students could voluntarily interact, with whom they wished, under only indirect teacher supervision. This was to be measured with a series of systematically taken photographs.

These five different types of situations were observed using different types of observation instruments most appropriate to the specific nature of the situation; however, the overall objective for observing each situation was the same: To determine the extent of biracial student interaction.

All five situations were measured several times during the school year, however, only the first and last measures are charted in this evaluation as we attempt to measure increases over initial levels. Thus, Product Objective I is a Pre-Post test.

A. DATA MODULE ONE: HYPOTHETICAL CHOICE OF PARTNERS TO ENGAGE IN SEVERAL DIVERSE HYPOTHETICAL ACTIVITIES. Classroom teachers and project staff administered a sociogram questionnaire which asked students to select two partners for three different types of hypothetical activities. The students were to choose partners they would like to go to a party with, do an academic assignment with and go camping with. The same questionnaire was administered to the same seventh grade Social Studies classes.

B. DATA MODULE TWO: REQUIRED ACTUAL CHOICE OF A PARTNER TO WORK ON AN ACADEMIC TASK UNDER DIRECT TEACHER SUPERVISION: Classroom teachers and project staff administered a qualitative

checklist to record the level of biracial interaction within seventh grade Social Studies classrooms, when students were given an academic assignment which forced them to work in teams of two. The students could choose to work with whomever they wished. The academic assignment was essentially the same each time it was administered, though insignificantly small changes were made. The assignment and the observations were made in the same Social Studies classes.

C. DATA MODULE THREE: REQUIRED ACTUAL CHOICE OF ANOTHER STUDENT TO SIT NEXT TO DURING AN INFORMAL ACADEMIC SITUATION UNDER INDIRECT TEACHER SUPERVISION. Classroom teachers administered an observation checklist to record the level of biracial interaction when students were in an informal academic situation. Seventh grade English classes, representing at least 25% of the total seventh grade student body, were given a free class in the library, during which time they were to pick a book and sit and read quietly at a table with whomever they wished. The teacher recorded seating choices; whether the same race or opposite.

D. DATA MODULE FOUR: NON-ACADEMIC SITUATIONS CONNECTED WITH THE OUTDOOR ACTIVITIES IN WHICH STUDENTS COULD VOLUNTARILY INTERACT WITH WHOM THEY WISHED UNDER INDIRECT SUPERVISION. Because of logistical and economic reasons it was unfortunately impossible for observers to record the nature of biracial interaction while the outdoor activities were occurring. The professional outdoor staff was too busy with direction, leadership and supervision to simultaneously collect data. A system of making periodic photographic assessments of behavior prior to, and following, each outdoor activity was designed. Different situations were systematically photographed for each group attending each activity.

1. Photographs of student seating patterns in the cafeteria prior to departure for the activity. Students were allowed to sit with whomever they wished, prior to taking the photograph. To analyze these pictures, the number of minority[1] students was counted and multiplied by two (2), which yielded the maximum number of potential interactions. The interactions were the unit of analysis. The actual biracial interactions were counted, and the percentage was computed.

2. Photographs of student seating patterns on the bus prior to arrival for the activity. Students were allowed to sit with whomever they wished prior to taking the photograph. The unit of analysis selected was whether a seat was integrated or not. Again, the maximum number of potentially integrated seats, which the evaluation team determined, was the same as the number of minority students present. The number of

[1]Minority in this case could mean either race, whichever has the smaller population present.

actually integrated seats was recorded and the percentage was then calculated.

3. On arrival at the Outdoor Center, students lined up along a rail in a straight line and were allowed to sit next to anyone they wished. Photographs were then taken. To analyze these photographs, the number of minority students was counted and multiplied by two (2), which yielded the maximum number of potential interactions. The interaction was the unit of analysis. The actual biracial interactions were counted and the percent of potential interactions was computed.

4. Before leaving the Outdoor Center, students lined up along a rail in a straight line and were allowed to sit next to anyone they wished. Photographs were then taken. To analyze these photographs, the number of minority students was counted and multiplied by two (2), which yielded the maximum number of potential interactions. The interaction was the unit of analysis. The actual biracial interactions were counted and the percent of potential interactions was computed.

5. Photographs of student seating patterns on the bus after completion of the activity. Students were allowed to sit with whomever they wished. The seat was the unit of analysis. The percentage of potentially integrated seats which were actually integrated was computed.

6. The students were again photographed on their return to the cafeteria following the outdoor activity. Again, they could sit with whomever they wished. The table was the unit of analysis again. The percentage of potentially integrated tables which were actually integrated was computed.

E. DATA MODULE FIVE: VOLUNTARY CHOICE OF PARTNERS FOR INTERACTION IN A NON-ACADEMIC, SOCIAL SITUATION UNDER INDIRECT TEACHER SUPERVISION. Photographic records were taken each month to observe the student seating patterns in the cafeteria during their lunch periods. The cafeteria was divided into six sections to take the photographs. For each section it was determined whether tables containing both races were present. The percentage of integrated sections was calculated and reported. The question of interest was the same as in all of the measures of Product Objective I: "Was there a significant increase in biracial choice during the school year?"

F. CRITERION FOR SUCCESS. The criterion level for each measure was the same: whether a significant increase in the level of biracial interaction occurred over initial levels in each of the measurements.

G. DATA COLLECTION. Data for each measure was collected on a regular basis, depending upon the type of measurement

technique. A complete description of the data collection occurs in the section on each measure used.

H. DATA ANALYSIS. In each of the measurements, true percentage of biracial interaction was computed by class or group. Tables showing the levels of biracial interaction were prepared. In each of these, the evaluation question read the same: "Was a significant increase in biracial interaction over initial levels observed?" The data for each measurement is presented in Chapter III, entitled: "Presentation of Results." Statistical analysis, and discussions are found in sections on "Interpretation of Results".

II. Product Objective II

"Seventh grade students will maintain within 10% the present low level of negative racially related behavior problems achieved during the 1974-75 school year." The evaluation monitored all situations in which students were referred to the office for four types of disciplinary infractions: racial or ethnic slurs, making a threat of violence, assaulting another person in the school and for fighting. Information was kept about: 1) the number of office referrals, 2) the number of suspensions for such infractions, 3) the number of these incidents which involved members of two separate races, 4) the complete description of each incident.

A Negative Racial Incident Review Board was formed, composed of the BACSTOP Project Director, school Principals, and Counselors. This review board carefully reviewed each incident which involved members of two races to determine whether the incident was overtly racial in nature. Information about biracial disciplinary problems from the previous three years was available.

A. CRITERION FOR SUCCESS. Since information for 1971-72, 1972-73, 1973-74, 1974-75 was available, the goal level was to maintain the number of negative biracial incidents within 10% of the 1974-75 school year. Additional comparisons were made with the figures for the previous year.

B. DATA COLLECTION. Data was collected on a daily basis and analyzed at the end of the academic year.

C. DATA ANALYSIS. The data was analyzed in a number of ways:

1. The total number of office referrals for the types of violent or potentially violent actions was computed. These figures were displayed in a chart of monthly totals and year long totals.

2. The total number of students suspended for the four violent-related offenses were computed and displayed in a chart of monthly totals.

3. The total number of biracial incidents were computed and demonstrated in a chart of monthly totals.

4. The Biracial Incident Review Board carefully reviewed each incident which involved students from two races, and based upon their knowledge of the students and the events, the members of the Board subjectively determined whether the biracial incidents were or were not overtly racially caused. These figures were calculated and displayed in a chart of monthly totals.

5. The records of the number of negative biracial incidents for the seventh grades in 1971-72, 1972-73, 73-74 and 74-75 were available. These incidents were compared with the total number of similar incidents occurring in the current year 1975-76. These were the figures used for comparison to determine whether the criterion for success was met. The percent of increase/decrease in interracial violence in the 1975-76 year over the 1974-75 year was calculated. The same percentage increase/decrease was calculated to compare 1971-72, 1972-73 and 1973-74.

6. Records of the biracial incidents were kept each week and recorded.

7. Data was gathered to show the number of suspensions for the same four violent-related disciplinary infractions occurring in the other three junior high schools in the Battle Creek Public School system. These results are presented in Chapter III.

III. Product Objective III

"Project Staff will gather baseline data on the number of incidents in which seventh grade students become involved in negative violent interracial interactions of other students during the 1974-75 school year." One of the problems experienced years prior to the initiation of the BACSTOP program was the occurrence of situations in which students of different races would become involved in someone else's fight or assault. Other students not originally involved in the incident would join in the violence and the incident would "snowball". Since there was no way to have evaluation observers present at the time that such an incident might occur, data about them had to be gathered from a careful review of anecdotal accounts of witnesses to the incidents. The Review Board carefully examined each violent incident which occurred during the year involving more than two students. The criteria to decide which of these incidents qualified as a "snowball incident" was whether students not directly involved in the original incident took sides and entered the incident on the basis of racial lines. To determine this, the Review Board collected the description of all negative interracial incidents which involved more than two students. Descriptive material was gathered from: 1) students involved directly, 2) teachers or other adults present, 3) student witnesses to the incident, 4) other students who knew some of the participants. The Review Board kept a weekly record of the total number of these incidents which involved more than two students. And they kept a weekly record of the number which, after examination, were determined to qualify as racially related.

A. CRITERION FOR SUCCESS. The goal was to maintain the number of "snowball" incidents within 10% of the 1974-75 school year.

B. DATA COLLECTION. The data was collected weekly and recorded. Four measures were kept and reported in table form:

1. The number of incidents of violence which involved more than two students.

2. The number of students involved in each incident.

3. The number of students suspended.

4. The number of incidents determined to be race related.

C. DATA ANALYSIS. The Review Board analyzed each situation with the process described above. The findings were reported in a table, showing the number of incidents occurring by month and yearly totals.

D. COMPARISON GROUP. Comparisons with 1974-75 evaluation results.

IV. Product Objective IV

"The Project staff will investigate the nature of academic achievement among seventh grade students."

Product Objective IV was designed to create a system which would provide information about the nature and amount of academic achievement made by seventh grade students. This system had to allow comparison to the normal growth of other groups of students within the nation and within the Battle Creek School System.

A. CRITERION FOR SUCCESS. Objective IV would be met if an increase in academic achievement occurred during the 1975-76 school year, as measured by pre-post results of the California Achievement Test, form A.

B. DATA COLLECTION SCHEDULE. To accomplish this objective, the California Achievement Test, form A, which is a nationally normed test for academic achievement, was used. This test was administered twice during the school year to a random sample of 25% of the seventh grade students, once as a pre-test in October, and again as a post-test in May.

C. DATA ANALYSIS. Scoring of the pre and post-tests administered to the random sample of seventh grade students yielded two mean achievement scores for the same group, one for the October test and one for the May test.

1. The mean amount of gain made by sample groups during the seven month period was computed. From this figure the rate of per/month gain in achievement was calculated.

2. Average rate of per/month gain in achievement made by

sample groups was compared with average rate of per/month gain in achievement of the California Achievement Test, form A, made by the other students in the Battle Creek School District, i.e., the district-wide norm of achievement.

3. Final scores of target, experimental and control groups, were compared.

D. COMPARISON GROUP. Comparison with 1974-75 evaluation results.

V. Process Objective I

The process objective of BACSTOP was simply that the BACSTOP program be developed and run. The actual wording for this year's evaluation follows:

A continuing program of activities will be planned and scheduled. Students will be offered, in advance, the opportunity to participate in the program. Student participation in the program will be measured.

Two types of measurement occurred. First, documentary evidence showing that the program did occur was collected. Second, attendance by activity and total program was calculated.

A. CRITERION FOR SUCCESS. Three criterion were set.

1. All planned activities will occur.

2. Students will be able to attend each activity. Activities will be announced at least a week in advance.

3. Student participation will be computed for each activity.

B. DATA COLLECTION. Throughout the year, as appropriate.

C. DATA ANALYSIS. For the documentary evidence, none is appropriate. For the attendance section, simple totals and percentage will be reported.

CHAPTER THREE - PART I

THE EVALUATION RESULTS

INTRODUCTION

In this chapter the results of the evaluation of the four product objectives and the single process objectives are reported.

PRODUCT OBJECTIVE NUMBER I

Objective: Seventh grade students will display an increased level of positive biracial interaction with members of the opposite race throughout the school year 1975-76.

Measurement Technique: Five different types of situations were observed (described in Chapter II) using various types of observation and measuring instruments. The over-all objective for observing each situation was the same; to determine the extent of biracial interaction. A significant increase in the number of biracial interactions throughout the school year was set as criterion for this objective for the 1975-76 school year. Due to different treatment of 1975-76 data as compared to 1974-75 data, comparisons cannot be made.

I. Level of Attainment

Percentage increases were large enough to create statistical significance but did not due to the evaluation design itself. (See limitations to the study, Chapter IV)

II. Answers to Evaluative Questions

A. Report on Data Collection: For the simplification of this evaluation only the first and last measures of four measures given throughout the year were used, thus providing pre and post data. Socio-metric questionnaires were given to six seventh grade Social Studies classes for data modules one and two. Three English classes were measured by observation checklists for data module three. The final two modules were measured with a series of candid photographs.

B. Presentation of Results: The results are presented in the following pages.

DATA MODULE ONE

HYPOTHETICAL CHOICE OF A PARTNER TO ENGAGE IN THREE HYPOTHETICAL ACTIVITIES.

In each case, students were asked to complete a questionnaire about school. (See sample, appendix) There were ten questions, only three of which were scored. These three asked students to choose a partner for three hypothetical situations. Situations were academic, social and recreational. The unit of analysis was the questionnaire. If one biracial choice

was made, criterion for that measure was met.

For each of the six classes where measures were taken the percentage of students making at least one biracial choice was computed. Since choices were hypothetical, there was no limit to the number of students who could potentially make a biracial choice. For each class measure, results were computed on the following form:

SAMPLE FORM I

SOCIOGRAM DATE_____
HOUR_____
TEACHER_____ RECORDER_____
NUMBER ON ROLL _____
NUMBER PRESENT _____
NUMBER MAKING A BIRACIAL CHOICE _____
% OF STUDENTS MAKING A BIRACIAL CHOICE _____

The results of Module One are presented in the following table:

TABLE III-1

NORTHWESTERN SOCIOGRAM				
CLASS ROOM	SEPTEMBER - OCTOBER		APRIL - MAY	
	STANDARD SCORE	RATIO	STANDARD SCORE	RATIO
S-3	33.33	9/27	25.0	6/24
S-4	27.3	6/22	55.6	10/18
S-5	38.7	12/31	42.3	11/26
W-3	20.7	6/29	22.2	6/27
W-4	13.6	3/22	54.2	13/24
W-5	47.8	11/23	65.2	15/23
	$\bar{x}$=30.23	Total Ratio 47/154=30.5	$\bar{x}$=44.08	Total Ratio 61/142=43.0
Amount of Total Increase/Decrease				12.95 Increase
Percent of Increase/Decrease				42.45% Increase

There was consistent increase in the number of biracial choices according to this measure. A total increase of 12.95 was recorded by the post measure in April and May of 1976. This increase is 42.45% of the pre measures in September and October of 1975.

It was felt by Project staff and classroom teachers that a greater percentage of biracial choices might have occurred if students were more capable of spelling names. Due to spelling difficulties students repeatedly put down names of friends they are most familiar with.

DATA MODULE TWO

ACTUAL REQUIRED CHOICES OF SEATING LOCATION DURING INFORMAL ACADEMIC SITUATION UNDER INDIRECT SUPERVISION.

In each measurement, students were asked to perform a mapping task having to do with the school. Sample paraphrased tasks included, "on the map show, by using the key, which rooms you like/dislike/anticipate". Students were given a mimeographed map and were required to mark in pairs, producing a single map from the group. In all cases, maps were completed by students and collected by the evaluators. The task was therefore both 1) meaningful and 2) interdependent.

Computation of results was simple, and thus, subject to less error. Each group handed in a map. (See sample, appendix) The names of all group members were on the map. The unit of analysis was the student's choice. Either the student chose a biracial partner or he/she did not. The number of biracial choices was computed.

In most cases the number of students of one race, usually black, was too small to allow potential integration of all groups. That is, if there were only five blacks in a class, the maximum number was computed in each case, and the percentage of possible biracial choices was computed for each of the six classes. Results were recorded on the following sample form:

SAMPLE FORM II

PEOPLE PATH DATE_____

HOUR_____

TEACHER_____ RECORDER_____

NUMBER OF BLACKS	____
NUMBER OF WHITES	____
MAXIMUM CLASS SIZE	____
MAXIMUM BIRACIAL CHOICES POSSIBLE	____
ACTUAL NUMBER BIRACIAL CHOICES	____
% ACTUAL OF POSSIBLE	____

The results of Module Two are presented in the following table:

TABLE III-2

NORTHWESTERN				
PEOPLE PATH				
CLASS ROOM	SEPTEMBER - OCTOBER		APRIL - MAY	
	STANDARD SCORE	RATIO	STANDARD SCORE	RATIO
S-3	20.0	4/20	00.00	0/12
S-4	15.38	4/26	33.00	4/12
S-5	23.08	6/26	14.29	2/14
W-3	9.09	2/22	20.00	4/20
W-4	14.29	2/14	28.57	4/14
W-5	20.00	4/20	42.86	6/14
	$\bar{x}$=16.97	Total Ratio 22/128=17.19	$\bar{x}$=23.18	Total Ratio 20/86=23.26
Amount of Total Increase/Decrease				06.07 Increase
Percent of Increase/Decrease				35.31% Increase

There was a consistent increase in the number of biracial choices achieved in a real task according to this measure. An increase from 17.19 in the pre measure of September-October to 23.26 in the post measure of April and May is noted. The amount of total increase was 6.07 providing a percentage increase of 35.31% over initial levels.

A total increase of 6.07, though not statistically significant, is significant when one considers the dynamics involved in this measure. The fact that any student picks another student, of another race, in front of class-mates is an increasing phenomenon illustrated by the above measurement.

DATA MODULE THREE

ACTUAL REQUIRED CHOICE OF SEATING LOCATION DURING AN INFORMAL ACADEMIC SITUATION UNDER INDIRECT TEACHER SUPERVISION.

In each case, students were taken to the library by their teacher and instructed to choose and check out a book. Students were then required to sit quietly and read for the balance of the period. This was the normal pattern of behavior for this activity and was not modified substantially for this evaluation. Thus, while the activity was not an interdependent or meaningful task, it was natural according to other school routines.

Students sat at small tables with anyone, and in any numbers. The choice was the unit of analysis. As in the social studies measure, the maximum possible interaction was computed first, and then the percent of possible interaction which was achieved.

The results of Module Three are presented in the following table:

TABLE III-3

NORTHWESTERN				
LIBRARY OBSERVATION				
CLASS ROOM	SEPTEMBER - OCTOBER		APRIL - MAY	
	STANDARD SCORE	RATIO	STANDARD SCORE	RATIO
J-2	50.0	12/24	14.28	2/14
J-4	25.0	4/16	28.58	4/14
J-5	00.0	0/14	37.50	6/16
	$\bar{x}$=25.0	Total Ratio 16/54=29.63	$\bar{x}$=26.79	Total Ratio 12/44=27.27
Amount of Total Increase/Decrease				02.36 Decrease
Percent of Increase/Decrease				07.96% Decrease

There was a decrease in this measure of 2.36 which is 7.96% of the pre score of September and October. As in the 1974-75 evaluation the variance between cells is suspiciously large. These results tend to verify the inference of the 1974-75 evaluators that the activity for this measure was both meaningless and irrelevant, thus promoting near-random choice patterns.

Every class experienced a variance from 00.00% level to a maximum of 50.00%. Such huge increases and decreases put the results in question.

DATA MODULE FOUR

NON-ACADEMIC SITUATION IN WHICH STUDENTS COULD VOLUNTARILY INTERACT WITH WHOM THEY WISHED UNDER INDIRECT TEACHER SUPERVISION.

Photos were taken of every group at the beginning and end of each BACSTOP activity. All groups left from the school. Students were called to the empty cafeteria before leaving and sat as they wished at three designated tables to receive final instructions and await the bus.

When students moved from the cafeteria to the bus they again sat as they wished. Photos of both rolls of seats were taken.

On arrival at the BACSTOP activity site, several miles from the school building, students left the bus and sat on a single rail fence to await instructions and patrol assignments. Photos were taken.

At the conclusion of each activity students were once again seated on the fence to await boarding the bus for the return trip. Photos were taken.

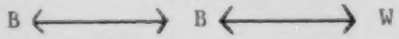
On return to the school and in the bus more photos were taken of both rolls of seats.

When students returned to the school, they returned to the cafeteria for a short debriefing session. Once again photos were taken of the three occupied tables.

Thus, students were photographed in six situations. This was done for four BACSTOP activities. Week-long trips were eliminated from this measure due to the limitation in total student involvement.

In each case, the extent of biracial interaction was computed.

In the cafeteria, bus, and on the rail the interaction was the unit of analysis. That is, in the following simplified sketch, three students are seated (bus, rail, table). There are two interactions shown by the arrows. One is biracial and one is not.



Thus, the amount of biracial interaction in the above example is 50.00% of the possible level.

The results of Module Four are presented in the following two tables:

TABLE III-4

NORTHWESTERN			
SEPTEMBER - OCTOBER			
CAFETERIA PHOTOGRAPHS			
PRE-ACTIVITY		POST-ACTIVITY	
STANDARD SCORE	RATIO	STANDARD SCORE	RATIO
32.14	9/28	26.92	7/26
14.29	2/14	14.29	2/14
10.00	2/20	23.08	6/26
50.00	9/18	31.25	5/16
25.00	3/12	11.11	2/18
18.18	4/22	27.27	6/22
N/A	N/A	N/A	N/A
05.56	1/18	15.00	3/20
$\bar{x}$=22.17	Total Ratio 30/132=22.81	$\bar{x}$=21.27	Total Ratio 31/142=21.83
Amount of Total Increase/Decrease			00.98 Decrease
Percent of Increase/Decrease			4.29% Decrease
BUS PHOTOGRAPHS			
00.00	0/12	30.77	4/13
00.00	0/8	09.09	1/11
08.33	1/12	06.67	1/15
18.18	2/11	36.36	4/11
00.00	0/9	00.00	0/9
20.00	2/10	25.00	2/8
16.67	1/6	00.00	0/11
00.00	0/9	00.00	0/10
$\bar{x}$=07.90	Total Ratio 6/77=07.79	$\bar{x}$=13.49	Total Ratio 12/88=13.64
Amount of Total Increase/Decrease			05.85 Increase
Percent of Increase/Decrease			75.09% Increase
RAIL PHOTOGRAPHS			
12.50	3/24	42.86	12/28
44.44	8/18	40.91	9/22
27.27	6/22	36.36	8/22
40.91	9/22	55.00	11/20
22.22	4/18	61.11	11/18
45.00	9/20	30.00	6/20
37.50	9/24	41.67	10/24
33.33	6/18	38.89	7/18
$\bar{x}$=32.90	Total Ratio 54/166=32.53	$\bar{x}$=43.35	Total Ratio 74/172=43.02
Amount of Total Increase/Decrease			10.49 Increase
Percent of Increase/Decrease			32.24% Increase

TABLE III-5

NORTHWESTERN			
APRIL - MAY			
CAFETERIA PHOTOGRAPHS			
PRE-ACTIVITY		POST-ACTIVITY	
STANDARD SCORE	RATIO	STANDARD SCORE	RATIO
20.83	5/24	18.18	4/22
42.86	6/14	16.67	3/18
05.00	1/20	12.50	2/16
00.00	0/10	33.33	4/12
12.50	3/24	10.00	2/20
N/A	N/A	00.00	N/A
22.22	4/18	16.67	3/18
33.33	4/12	00.00	0/12
$\bar{x}$=19.53	Total Ratio 23/122=18.85	$\bar{x}$=15.34	Total Ratio 18/118=15.25
Amount of Total Increase/Decrease			03.60 Decrease
Percent of Increase/Decrease			19.09% Decrease
BUS PHOTOGRAPHS			
00.00	0/6	00.00	0/6
10.00	1/10	00.00	0/9
11.11	1/9	37.50	3/8
00.00	0/12	25.00	3/12
00.00	0/5	00.00	0/7
00.00	0/11	27.27	3/11
00.00	0/8	10.00	1/10
08.33	1/12	00.00	0/11
$\bar{x}$=03.68	Total Ratio 3/73=04.10	$\bar{x}$=12.47	Total Ratio 10/74=13.51
Amount of Total Increase/Decrease			09.41 Increase
Percent of Increase/Decrease			32.95% Increase
RAIL PHOTOGRAPHS			
31.82	7/22	29.17	7/24
50.00	10/20	66.67	12/18
55.56	10/18	55.00	11/20
08.33	1/12	42.86	6/14
29.17	7/24	45.83	11/24
16.67	3/18	72.22	13/18
27.28	5/18	77.78	14/18
41.67	5/12	33.33	4/12
$\bar{X}$=32.56	Total Ratio 48/144=33.33	$\bar{x}$=52.86	Total Ratio 78/148=52.70
Amount of Total Increase/Decrease			19.37 Increase
Percent of Increase/Decrease			58.11% Increase

During the year observations were made of four general BAC-STOP activities. In tables III-4 and 5 these are shown in chronological order. Also, the six photo-records are listed in order as they occurred for each trip. Data can be observed in order in both of the above instances. Each cell includes the results of eight separate groups.

Post-activity data shows consistent increases over pre-activity

results in four of six observations. Of more consequential importance is the fact that total gains and percentage increases are more substantial in the April and May results as compared to initial levels of September and October. Table III-6, which follows, further illustrates pre and post measures.

TABLE III-6

SEPTEMBER-OCTOBER	
POST-CAFE	-00.98
POST-BUS	+05.85
POST-RAIL	+10.49
$\bar{x}$ TOTAL	+ 5.12

APRIL-MAY	
POST-CAFE	-13.60
POST-BUS	+ 9.41
POST-RAIL	+19.37
$\bar{x}$ TOTAL	+ 8.39

Thus, BACSTOP is effective in increasing biracial interaction by year and by activity.

Why were photos not taken during BACSTOP activities? When students are on patrol, their patrols are always integrated by the nature of the activity, as are students in working, traveling, and sleeping. Photo estimates would thus be inflated. It is the voluntary interaction beyond the BACSTOP patrol and control that is the objective.

One voluntary activity, the five-day winter expedition was not used in this measure. The possibility existed that only students who were already comfortable with the integrated BACSTOP method of operation would select this expedition. Also, this activity was limited to half the student body and had requirements for participation that would tend to inflate results.

DATA MODULE FIVE

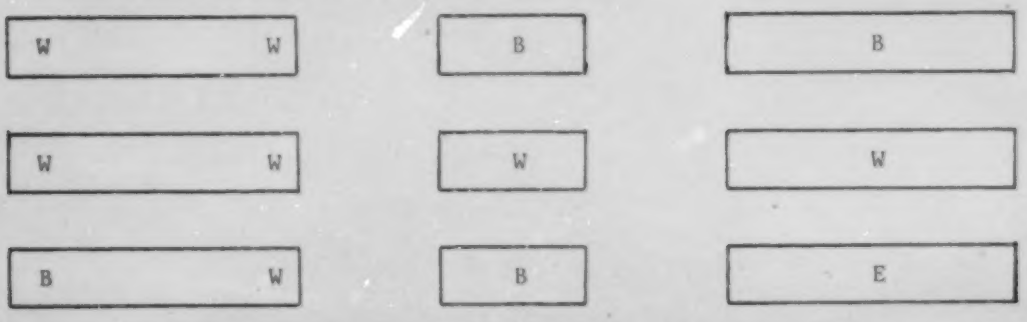
VOLUNTARY CHOICE OF PARTNERS FOR INTERACTION IN A NON-ACADEMIC, SOCIAL SITUATION UNDER INDIRECT TEACHER SUPERVISION.

The cafeteria at Northwestern has 58 tables. Once each month students in all three lunch hours were photographed. Choice of seating was entirely up to the students.

The cafeteria was divided into six sections for picture taking and calculating reasons. The table was the basic unit of analysis and was recorded as either (B) black, (W) white, (E) empty.

The six sections used for picture taking were used as the unit of analysis. For each it was asked whether the section was integrated or not. Thus, six measures for each of three lunch hours were available per month. Observations were taken October through May, but only the first and last measures are used.

The following shows what a section of the cafeteria might have looked like:



This section is obviously integrated. A similar sketch was prepared for each of the six sections for each lunch period. If, for example, two sections were integrated during the first lunch period, the level reported here would be 33.33% equal to two of six.

The results of Module Five are presented in the following table:

TABLE III-7

NORTHWESTERN			
LUNCH ROOM OBSERVATION			
SEPTEMBER - OCTOBER		APRIL - MAY	
STANDARD SCORE	RATIO	STANDARD SCORE	RATIO
38.88	7/18	61.11	11/18
Amount of Total Increase/Decrease			22.22Increase
Percent of Increase/Decrease			57.13% Increase

The following table shows the yearly level of interaction in each of the six sections which were used as the unit of analysis.

TABLE III-8

CAFETERIA SECTIONS			
	BLACK	GRAY	WHITE
SECTIONS	12.5 (3)	75.00 (2)	20.83 (1)
	50.00 (4)	75.00 (5)	29.16 (6)
x 1975-76	31.25	75.00	24.99

Note the lower levels of interaction in the "white end" sections and the "black end" sections. The center or "gray" sections are highly integrated and there is also significant interaction in the section 4 of the traditionally black end of the cafeteria.

Interpretation of Results: In looking at a yearly gain there was a total increase of 22.22% over the 38.88% record-

ed in the first measure of October.

Mixed tables were significantly more evident during the 1975-76 school year. A total of eighteen mixed tables compared to only two recorded during the 1974-75 measure indicates a slow but consistent integration of the cafeteria.

One last example will illustrate the increasing willingness of students to sit in sections which in past years were totally all black or all white. The grand mean shown in table III-8 showing averages in traditionally black, white, and gray sections is encouraging. Strong gains have been recorded in the white sections 1 and 6 as compared to the 1974-75 measure. The black and gray sections remain reasonably consistent.

C. Interpretation of Results: Four of the five modules in Program Objective I resulted in significant hard percentage increases. The Library Observation Checklist was the only measure that failed to show increases over initial levels. While it was impossible to show significant statistical increases it should be pointed out once again that this failure was a short-coming of the evaluation design and not attributable to the data or treatment of the data. (See limitations to the study, Chapter IV)

D. Side Effects and Considerations: None beyond those mentioned above were noted to be consequential.

PRODUCT OBJECTIVE NUMBER II

DATA MODULE ONE

Objective: Seventh grade students will maintain the present low level of racially related problems during the 1975-76 school year.

Measurement Technique: Behavioral referrals were monitored, and involved school personnel decided which incidents were biracial in nature. Criterion will be judged to have been met if negative biracial incidents are maintained within 10% of the reduced levels of the 1974-75 school year.

I. Level of Attainment

Criterion level was achieved according to this measure.

II. Answers to Evaluative Questions

A. Report on Data Collection: Every time that an event resulted in a formal disciplinary referral, that event was potential data for BACSTOP. There were several levels of filtering.

1. Was the incident biracial? This simply involved knowing the identity of the participants.

2. Was race an issue? That is, was there evidence of racial slur or motivation as part of the event? This was determined by school faculty who handled the referral. (See appendix E)

3. Did the incident involve 1) racial or ethnic slur, 2) threat, 3) assault or, 4) fighting? These four standard categories are used throughout the Battle Creek school system.

4. Did suspension result?

B. Presentation of Results: Some investigation of the context of the project is appropriate. There are four junior high schools in the Battle Creek school district. The following table III-9 compares the percentage of violence at each of four schools. Four types of suspensions, all for violence or potential violence, form the data base. These are suspensions resulting from 1) racial or ethnic slurs, 2) threats to harm another person, 3) assault, and 4) fighting.

TABLE III-9

SCHOOL	NUMBER OF STUDENTS	NUMBER OF STUDENTS SUSPENDED	PERCENT OF VIOLENCE 1974-75	PERCENT OF VIOLENCE 1975-76
N.W. *	750	126	19.47	16.80
S.W. *	378	58	9.73	15.34
W.K.	716	115	16.52	16.06
S.E.	368	114	26.75	30.97
* DENOTES BACSTOP SCHOOLS				

According to the above table Northwestern is not atypically violent and has managed to close the gap with other large junior high schools in the system. The number of suspensions is consistent with W.K., a school that is traditionally non-violent when compared to Northwestern in past years.

To what extent was race a factor in these 126 suspensions? Table III-10 is a collection of information about these suspensions. The last row of the table is critical for the present purpose since it displays the incidents which were found to have been racially motivated. The fact that two students who fight are of a different race does not conclude that the incident was racially motivated. For that reason careful review of each case was very important in this measure. If there was any doubt as to the nature of a black/white incident it was automatically considered a racial incident.

TABLE III-10

		1974-75	1975-76
TOTAL SCHOOL	STUDENT SUSPENSIONS RESULTING FROM REFERRALS 7 8 10 11	149	126
SEVENTH GRADE ONLY	TOTAL SUSPENSIONS	59	36
	SUSPENSIONS INVOLVING TWO RACES	24	11
	RACIAL MOTIVATED INCIDENTS	14	9

Of the total number of violent incidents involving members of the opposite race only 9 of them were determined to have racial motivations. This figure is well within 10% of the 1974-75 measure and is lower, thus effecting a continued decline in racial incidents.

To further illustrate this continued decline longitudinal data is provided in the following tables.

TABLE III-11

GRADE	1971-72	1972-73	1973-74	1974-75	1975-76
7	131	44	35	24	11
8			17	11	7
9				10	4
CROSS GRADE				11	1
TOTALS				56	23

The preceding table shows comparisons of yearly totals of violent incidents having two races involved. Note declines in the number of negative biracial incidents has been dropping yearly, as demonstrated in the following tables III-12 and 13.

TABLE III-12

YEAR	DECREASE FROM 1971-72
1971-72	00.00%
1972-73	66.66%
1973-74	73.48%
1974-75	81.82%
1975-76	91.66%

TABLE III-13

YEAR	DECREASE YEAR BY YEAR	PERCENT
1971-72	COMPARED TO 1970-71	00.00%
1972-73	COMPARED TO 1971-72	66.67%
1973-74	COMPARED TO 1972-73	20.45%
1974-75	COMPARED TO 1973-74	31.43%
1975-76	COMPARED TO 1974-75	54.16%

The above data helps to illustrate the continuous decline in a variety of race related problems. There have been fewer problems each year.

One final table will illustrate the low degree of violent racial tension in 1975-76. Table III-14 shows that only a small proportion of the violent incidents which were shown to have biracial participants in fact had any racial motivation. The table further illustrates that the 1975-76 figures are under the already low level of racial incidents recorded in the 1974-75 measure.

TABLE III-14

GRADE	7	8	9	CROSS GRADE	TOTALS
TWO RACE INCIDENTS	11	7	4	1	23
RACIALLY MOTIVATED	9	6	4	1	20
NON-RACIAL	2				2
UNCERTAIN		1			1

C. Interpretation of Results: The level of negative racial interaction has been documented. The criterion level allowed a maximum of 34 biracial incidents in seventh grade. There were in fact only 11 and 9 of those that were classified as having negative racial causes.

D. Side Effects and Considerations: It should be noted that there was a factor that might have contributed to the data recorded for this measure. Teachers, counselors, and administrators of the four junior high schools in the Battle Creek system do not necessarily report incidents at the same level. For instance, staff of one school may be quicker to refer students than the staff of another school. This could, and surely does, have some effect on the data presented.

It should be further noted that despite the above observation longitudinal data does give a high degree of validity to existing data recorded thus far.

PRODUCT OBJECTIVE NUMBER III

DATA MODULE ONE

Objective: Data on the number of incidents in which seventh grade students become involved in the negative violent interracial incidents of other students during the 1975-76 year will be collected. A continued decline from 1974-75 levels is set as criterion for this measure.

Measurement Technique: Project and Northwestern staff systematically reviewed office referrals which were recorded in Product Objective II. From these referrals those incidents which involved more than two students were recorded. Staff then carefully examined each incident, gathered data about them, interviewed the participants and witnesses to the incidents, and collected anecdotal information to describe the incident. After examining all evidence, a determination was made deciding whether each incident was "a negative violent interracial incident which snowballed on the basis of racial lines and allegiance."

I. Level of Attainment

The objective was achieved according to this measure.

II. Answers to Evaluative Questions

A. Report on Data Collection: The data was collected on a weekly basis. It was analyzed and reported in table III-15 and table III-16. Table III-15 shows the number of negative biracial incidents which involved more than two students from the seventh grade. Table III-16 shows the total number of negative biracial incidents which involved more than two students from any grade in the school.

B. Presentation of Results: Snowballing incidents in which students would align themselves along racial lines and enter on-going interracial acts of violence had been a severe problem at Northwestern Junior High during the pre-BACSTOP years. Records of such incidents were not kept until the 1974-75 school year at which time this evaluation was instituted. It should be noted that prior to BACSTOP, staff and administration felt a strain to keep the "lid on". Staff reported that negative interracial snowballing incidents were frequent and very hostile.

TABLE III-15

GRADE 7	SEPT. thru JUNE	TOTALS 1974	TOTALS 1975
NUMBER OF INCIDENTS	0	1	0
NUMBER OF STUDENTS	0	3	0
SUSPENSIONS	0	1	0
RACIALLY MOTIVATED	0	0	0

TABLE III-16

GRADES 7-8-9	SEPT. thru JUNE	TOTALS 1974	TOTALS 1975
NUMBER OF INCIDENTS	0	2	0
NUMBER OF STUDENTS	0	6	0
NUMBER SUSPENDED	0	2	0
RACIALLY MOTIVATED	0	1	0

It is evident from the initial examination of table III-15 that such incidents were hardly frequent in 1974-75 and non-existent in 1975-76. While there was only one incident reported in 1974-75 (racial motivation in doubt), no incidents which involved more than two students were reported in 1975-76. From the evidence it seems safe to conclude that group interracial conflict was uncommon in 1974-75, and absent in this years evaluation effort.

Table III-16 records the number of incidents which involved more than two students for all grades 7-9. Only two incidents which involved more than two students occurred during 1974-75. One of these incidents was judged to be racially motivated. During the 1975-76 school year no incidents were reported at all three grade levels.

C. Interpretation of Results: Data collected during the 1974-75 school year suggests that group violence at Northwestern was highly uncommon. Only one incident which was racially motivated occurred among the total school population during that year. A zero incident rate during the 1975-75 school year demonstrates continued decline and thus establishes criterion for this measure.

D. Side Effects and Considerations: None other than those already mentioned.

PRODUCT OBJECTIVE NUMBER IV

DATA MODULE ONE

Objective: Project staff will investigate the academic achievement of seventh grade students during the 1975-76 school year.

Measurement Technique: The California Achievement Test will be administered to a random sample of students twice during the year. Pre and post scores will be computed. Procedures will be statistically valid. A statistically significant increase in academic achievement above pre-test levels is set as criterion for this measure.

I. Level of Attainment

Criterion level was achieved according to this measure, and was statistically significant at the .05% level.

II. Answers to Evaluative Questions

A. Report on Data Collection: It was determined that a 25% sample would be adequate. Since continued testing of students selected randomly from an alphabetical list presented many difficulties in testing, a new method of selection was incorporated. It was decided that two randomly selected classes (non-elective) would meet qualifications for random selection and provide much better testing arrangements. As in 1974-75 a few students were excused from the test rather than subject them to an academic exercise which was obviously beyond their abilities, (i.e.; special education students).

Form A of the California Achievement Test was administered in early November and again in mid May. Data was treated as if a full seven months had elapsed.

B. Presentation of Results: The results are shown in the following table.

TABLE III-17

DATE TESTED	NUMBER OF STUDENTS	NORTHWESTERN	
		1974-75	1975-76
NOV.	61	6.0	6.2
MAY	56	6.8	6.9

In table III-17 above we find that achievement in 1975-76 was comparable to the 1974-75 levels. The 1975-76 levels, however, were slightly higher on both the pre and post measures. In seven months, students showed a gain of seven months. This amounts to a per month growth level of 1.0 months. The students in the sample at the beginning of November had an average achievement level of 6.2. This is at grade 7.2, so during those 7.2 years of school their own average rate of growth had been 0.86 months per month

of school. Thus, in 1975-76 BACSTOP students in this sample exceeded their own rate of growth. In addition the BACSTOP sample group also exceeded district norms for rate of growth which is at .63 gain per month.

C. Interpretation of Results: Once again BACSTOP students experienced academic growth. This measure further lends validity to the notion that absence from class room activity on a limited basis does not retard academic growth. Acceleration of growth and "Better Acquisition of Cognitive Skills" has occurred during 1975-76.

D. Side Effects and Considerations: None.

PROCESS OBJECTIVE NUMBER ONE

DATA MODULE ONE

Objectives: The objectives were written as follows:

A continuing program of activities will be planned and scheduled.

Students will be offered in advance the opportunity to participate in the program.

Student participation in the project will be measured.

These were to be measured by collecting documentary evidence and by computing attendance figures by activity and for the total program. Completion of these activities would constitute criterion level.

I. Level of Attainment

Criterion level was achieved according to this measure.

II. Answers to Evaluative Questions

A. Report on Data Collection: As the BACSTOP program was planned, implemented and modified as needed, documentary materials describing the program were collected. Four of these are included in this evaluation. They include the following:

1. A letter sent to parents at the beginning of the school year explaining BACSTOP.

2. A letter sent to parents one week before the beginning of each activity.

3. A schedule of the year's activities.

4. A letter of explanation for each activity.

B. Presentation of Results: Form documentations are inserted directly following this page.

Table III-18 showing attendance by activity and overall averages is included below.

TABLE III-18

ROPES COURSE	BACK PACKING	SKIING SOLO	CANOE CYCLE	AVERAGE % 1974-75	AVERAGE % 1975-76
86.99%	77.13%	70.40%	77.13%	75%	78%
194	172	157	172	180	173

PROJECT BACSTOP
Battle Creek Public Schools

Northwestern Junior High School
176 Limit Street
Battle Creek, Michigan 49017
962-5581 ext. 306

Outdoor Education Center
Rt. 1
Dowling, Michigan 49050

Dear Parent:

Most of you know about Project BACSTOP, but you may still have questions about it. In order to fully explain just what BACSTOP is and how it works, I have arranged to have several meetings. You will soon receive information as to time and location. I have a complete slide presentation showing each activity. I hope you can attend one of these meetings.

WHAT IS BACSTOP? It is an outdoor adventure program for Northwestern and Southwestern seventh grade students.

WHY DO WE HAVE BACSTOP? We have BACSTOP for two reasons. We believe that our students can learn more, and more efficiently than they have been, and we believe that students can learn to get along better with each other and with themselves.

DOES IT WORK? It certainly does. During the past three years there has been a tremendous reduction in the number of racial problems at Northwestern, and research data and teachers report that students are doing a much better job in the classroom.

WHAT WILL STUDENTS DO AT BACSTOP? Lots of exciting things. They will learn to communicate with each other through mutual cooperation, understanding, and respect. Their adventures will range from canoeing on the Thornapple River to cross-country skiing at Wilderness State Park near Mackinaw City. They will learn a great deal about themselves as they meet new challenges and about other students as they work and play together. They will also learn a great deal about the out-of-doors. All activities will be under the direct supervision of the highly skilled and experienced BACSTOP instructors.

WHAT WILL IT COST? It will cost you nothing. Everything will be provided except for the personal items your son or daughter would normally need.

WILL BOYS AND GIRLS GO TO BACSTOP TOGETHER? No. Boys and girls are always scheduled separately.

HOW WILL YOU KNOW WHAT TO PLAN ON? One week before each BACSTOP trip, you will receive a detailed explanation of the activity, a list of things your child will need to bring, and exact dates and times of departures and returns. Your child must also fill out a medical form before he/she can participate.

Sincerely,

49

Lee Snooks, Director
Project BACSTOP

Activity _____

Departure _____

Return _____

Your child has been scheduled to participate in BACSTOP on the above date. He/she will come to school at the regular time and report to first hour homeroom as usual. After taking attendance we will meet in the cafeteria and then go by bus to the Outdoor Education Center.

I have enclosed a copy of the session description so that you will understand what we will be doing. Please share all materials with your child so that he/she will know about this experience in advance.

In preparation for this session, please consult the enclosed clothing and equipment list and pack these things in a double paper shopping bag. There will not be room on the bus for hard luggage.

There is no cost for any BACSTOP activity, and there will be no need for money, watches, and other valuables. Please see that these things are left at home. We cannot be responsible for lost items. All camping equipment for BACSTOP is provided for students.

If you have any questions about this activity, you may contact me at my office by calling 962-5581, ext. 306, or at my home by calling 965-2118.

Sincerely,

Lee Snooks, Director
Project BACSTOP

BACSTOP
1975-1976

SEPTEMBER

M	T	W	TH	F	
1	2	3	4	5	
8	9	10	11	12	
15	16	17	18	19	RC/R
22	23	24	25	26	RC/R
29	30				RC/R

OCTOBER

M	T	W	TH	F	
		1	2	3	RC/R
6	7	8	9	10	RC/R
13	14	15	16	17	RC/R
20	21	22	23	24	RC/R
27	28	29	30	31	RC/R

NOVEMBER

M	T	W	TH	F	
3	4	5	6	7	BP/O
10	11	12	13	14	BP/O
17	18	19	20	21	BP/O
24	25	26	27	28	BP/O

DECEMBER

M	T	W	TH	F	
1	2	3	4	5	BP/O
8	9	10	11	12	BP/O
15	16	17	18	19	BP/O
22	23	24	25	26	

JANUARY

M	T	W	TH	F	
			1	2	
5	6	7	8	9	XK/S
12	13	14	15	16	W
19	20	21	22	23	XK/S
26	27	28	29	30	XK/S

FEBRUARY

	M	T	W	TH	F
XK/S	2	3	4	5	6
W	9	10	11	12	13
	16	17	18	19	20
XK/S	23	24	25	26	27

MARCH

	M	T	W	TH	F
XK/S	1	2	3	4	5
XK/S	8	9	10	11	12
W	15	16	17	18	19
	22	23	24	25	26
W	29	30	31		

APRIL

	M	T	W	TH	F
W				1	2
	5	6	7	8	9
C/C	12	13	14	15	16
C/C	19	20	21	22	23
C/C	26	27	28	29	30

MAY

	M	T	W	TH	F
C/C	3	4	5	6	7
C/C	10	11	12	13	14
C/C	17	18	19	20	21
C/C	24	25	26	27	28

RC/R Ropes Course & Rappelling
BP/O Backpacking & Orienteering
XK/S Cross-Country Skiing & Dual Solo
C/C Canoeing & Cycle Touring
W Wilderness State Park Expedition

BACSTOP

SESSION I

ROPES COURSE

CLIMBING AND RAPPELLING

The first session planned for the seventh grade BACSTOP students is a combination of physical and mental challenges designed to promote group interaction and positive self-concepts.

On the ropes course, students will work on a sequence of physical challenges that appear difficult and sometimes frightening, thus promoting pride and confidence when all or part of the course is completed. It should be noted that no student fails at the ropes course, as all participants are capable of part, if not all, of the course.

Climbing and rappelling are activities that also present students with physical and mental challenges. The purpose of these challenges is to further promote self-confidence and to gain an understanding of the feelings of others as they participate in stressful activities. Professional climbing equipment and carefully planned safety procedures assure maximum student safety.

Perhaps the most important activity of this first session will be that of outdoor living. Students will be introduced to a variety of camping skills, and will live and work together in small patrols. Group interaction and cooperation will be emphasized as students set up campsites, cook meals, and generally attend to their own physical and mental needs under adult supervision.

As in all BACSTOP activities, students will rely on group cooperation and participation for the successful completion of the expedition.

Lee Snooks, Director
Project BACSTOP

BACSTOP

SESSION II

BACKPACKING ORIENTEERING

In the first session of BACSTOP we have attempted to program students into activities which emphasize group communication and personal accomplishment. In these activities, students have learned that they are able to do more than they at first thought they might, and they have grown to realize that all of us have a great deal in common with each other. Students have received instruction in outdoor skills which will be put to practical use in the weeks and months ahead.

Session II is a backpacking expedition into the Allegan State Forest, located about 50 miles from Battle Creek. Students are getting basic instruction in the use of maps and compasses in their classes at school, and of course, in the woods as they go with their patrols on this first cold weather activity. Students will again be in small patrols under the supervision of experienced BACSTOP instructors.

Each patrol member will have his own backpack in which he will carry personal gear as well as patrol equipment, such as sleeping bags, tents, food, pans, etc. Individual packs will weigh between 20 to 25 pounds. BACSTOP packs are of high quality and are designed to place the full weight of the load on the packer's hips rather than the shoulders and back. Travel will be through the woods hiking on trails to the evening's campsite.

Temperatures will be low, so each packer will sleep in two sleeping bags to insure warmth and comfort at night. Each packer will sleep on an insulated foam pad which prevents the cold of the ground from being transmitted to the individual.

As in all BACSTOP activities, students will rely on group cooperation and participation for the successful completion of the expedition.

All equipment will be provided.

Lee Snooks, Director
Project BACSTOP

BACSTOP

SESSION III

SKIING SOLO

Cross-country skiing, as a popular sport, is a recent development in the United States. The use of cross-country skiis is to enable the skier to avoid sinking into snow by gliding easily on the surface. It is thus a form of winter transportation that permits a skier to ski across flat terrain and up-hill as well as down-hill.

The equipment used in cross-country skiing is quite different from the equipment used in down-hill skiing. The skiis are much narrower and lighter than down-hill skiis, and the skier's foot is attached only at the toe by special bindings.

BACSTOP students will receive basic instruction in cross-country skiing by experienced staff members and will spend considerable time practicing the fundamentals.

In addition to cross-country skiing we will give BACSTOP students the opportunity to learn the use of snowshoes. The use of skiis and snowshoes is dependent upon adequate amounts of snow, and optional activities will be planned when insufficient amounts of snow exist.

All students will sleep in tents and will use double sleeping bags to insure maximum comfort. Tent sites will be placed approximately fifty yards apart to facilitate the second phase of the session which we call the Dual Solo. A BACSTOP student and partner will camp in isolated areas one evening and part of the following morning. This activity will be under constant adult supervision. In the past the dual solo has greatly enhanced students getting to know each other, and also develops student pride in using more responsibility and skills.

As in all BACSTOP activities, students will rely on group cooperation and participation for the successful completion of the expedition.

All camping and skiing equipment will be provided.

Lee Snooks, Director
Project BACSTOP

BACSTOP

SESSION IV

CANOEING SOLO

The Thornapple River will be the site of the two-day canoe expedition for BACSTOP students. Students will be bused from school to the Outdoor Education Center at Clear Lake to pack their gear and make final preparations for the canoe trip. We will put in on the Thornapple River at Hastings, and canoe to Irving, Michigan, with an overnight stay on the river banks at Bull Prairie.

Students will be required to wear BACSTOP U.S. Coast Guard approved life jackets at all times while on the river. The Thornapple River is not treacherous. For the most part it is slow-moving and shallow. There is some white water depending on location and season. As it meanders through Barry County, it will give BACSTOP students a very pleasant break from the routine of school, and of course provide them with another opportunity to work together. Students will be under the close supervision of experienced BACSTOP instructors and school staff. Proper rain gear will be provided if necessary.

Cycling has increased in popularity by leaps and bounds these past few years. People are discovering the pleasure of getting to their destination under their own power on non-polluting vehicles. For our students, cycling will be good training, good exercise, and good fun.

Instruction will be given by BACSTOP staff in the areas of safety and care and maintenance of ten-speed bicycles. Emphasis will be placed on road safety.

In keeping with BACSTOP philosophy, cycle touring will be a group oriented activity putting students in situations where they must be responsible for themselves, their equipment, and each other. All cycle routes will be on paved, lightly traveled roads. Ten-speed bikes will be provided.

Lee Snooks, Director
Project BACSTOP

BACSTOP

CLOTHING AND EQUIPMENT LIST

This list is intended to be a guide to assist you in preparing for the BACSTOP experience. The following items are considered essential for your child's well-being and comfort. Please do not send more than the minimum amount suggested.

SEPT.-OCT.	NOV.-DEC.-JAN.-FEB.-MAR.	APR.-MAY
2 Shirts	2 Wool or flannel shirts	2 Shirts
2 Peg leg pants	2 Straight leg and heavy	2 Peg leg pants
2 Sets of underwear	2 Sets or long-johns	2 Sets of underwear
1 Lightweight jacket	1 Heavy winter coat	1 Lightweight coat
1 Sweater or sweatshirt	1 Heavy sweater	1 Pair tennis shoes
1 Pair of tennis shoes	1 Pair winter boots	1 Wide brim hat
1 Wide brim hat	1 Wool hat that covers ears	3 Pair socks
3 Pair socks	4 Pair socks, 75% wool	1 Towel
1 Towel	1 Towel	1 Washcloth
1 Washcloth	1 Washcloth	1 Pair golves
1 Pair gloves or mittens	1 Pair winter mittens	1 Sweater

PERSONAL ITEMS	OPTIONAL ITEMS
Toothbrush	Flashlight
Soap	Camera
Handkerchief	Sunglasses
Comb and brush	

All items should be marked for easy identification and brought in a double paper bag. Please send old knock-around clothes, as kids and clothes will get grubby.

DO NOT SEND WATCHES, JACK-KNIVES OR SNACKS OF ANY KIND.

CHAPTER THREE - PART II

THE EVALUATION RESULTS

INTRODUCTION

Data was gathered from three junior high schools in the Battle Creek School system: Northwestern, where the project has operated for four years; Southwestern, where BACSTOP activities were introduced at a lesser level of involvement; and at Southeastern, which had no involvement in BACSTOP activities. By using these three data sources, some careful comparisons can be made and inferences may be drawn concerning the impact of BACSTOP programming at a different school and at a reduced level of involvement.

The seventh grade students at Northwestern were identified as the target group during the 1975-76 school year. Data on this group has already been presented in Chapter III - Part I, and was compared to data gathered during the 1974-75 school year. The control group was the 1975-76 seventh grade class of Southeastern. The 1975-76 seventh grade class of Southwestern was the experimental audience. It is with this group that exportability and student achievement must be demonstrated within the confines of this experimental mode.

While it is easy to compare statistics and formulute opinions, it is necessary that this be done with extreme care. Each school is different in geographical location, socio-economic backgrounds, staff mode of operation, and ethnic representation. All of these factors project into this evaluation in unknown quantities. Some inferences can be made from data collected from these three schools. More important, base line data collected at Southwestern does support the exportability of the BACSTOP program.

The format for this section of Chapter III has been altered for some very obvious reasons. The same evaluation design was implemented during 1975-76 at the three junior high schools. Therefore, it will be unnecessary to repeat information pertaining to the design and measurement techniques as implementation and administration remained consistent in all three schools. Product objectives and levels of attainment are relevant only to Southwestern in Part II of Chapter III. Product objectivies have already been thoroughly discussed in Part I of this chapter and will not be further dealt with. Tables will be presented showing the results for 1975-76 from the data collected at Northwestern, Southwestern, and Southeastern. Subsequently, presentation of results, interpretation of results, and side effects and considerations will be discussed.

A brief summary describing Southwestern and Southeastern is included in order to give readers some background information about the schools and the communities they service.

SOUTHWESTERN

I. The Community: Southwestern Junior High School is geographically

located in the southwestern section of Battle Creek and in a residential non-industrial location. The areas to the north and west of the school are heavily black and reflect a lower middle class to upper lower class socio-economic group. Within one mile of Southwestern is a large apartment complex that contains both black and white families that represent the lower middle socio-economic group. The homes in the Southwestern district are mostly one family dwellings and apartments located within larger and older homes. There is no extensive area that contains any large degree of upper middle class or even middle class families. There are, however, some very well kept neighborhoods to the south and southwest of the school.

The Southwestern school district encompasses approximately five square miles. The student population comes from three feeder elementary buildings. The Coburn school is made up of one-family dwellings that represent lower middle class to middle class citizens. There is much pride reflected in the care of their homes and concern for the education of their children. Most of the families are white and have been in the area for quite some time. Wilson School is predominately black and the other feeder school, Roosevelt, is predominately white. Both areas constitute very transient neighborhoods and represent lower middle to the upper lower socio-economic group. Most homes in the area are old, but generally well-maintained.

The School: Southwestern is the smallest of the four junior high schools in Battle Creek. The student population is approximately 68% white and 30% black. The remaining 2% are of Mexican American heritage. Over 60% of the Southwestern students come from economically disadvantaged homes and thus receive federal and local aid for a variety of services. Approximately 50% of Southwestern students score sufficiently below grade level to qualify for Title I assistance.

SOUTHEASTERN

II. The Community: Southeastern is geographically located between two major cereal factories. There is also located nearby, a small business district. The homes in the district are mostly one-family dwellings, but sometimes also accomodate relatives and friends. Some of the larger homes have been converted to apartments. There are several new apartment complexes within walking distance of the school, housing both white and black with better than average incomes.

The area covers approximately 4 square miles and is rectangular in shape. The population is divided into 4 basic areas. Post Addition is made up of one-family homes with a few converted apartment complexes. There is pride reflected in the care of their homes. Most of the families are white. There are two predominately black neighborhoods, one located behind the small business district near the school and one about a mile away from Southeastern. There has been, in the past, some friction between the two neighborhoods, but it has not been apparent in the past year.

The fourth area is located to the north and east of Southeastern. This area in general is made up of white southern families. The area is divided into Brownlee Park and Fairfax. Each area is proud of its identity and this necessitates proper identification. All of the four areas reflect the full breadth of middle class to very low socio-economic strata.

The School: Southeastern is the third largest of the four junior high schools in Battle Creek. The student population is 84% white and 16% black. Only 9 students come from Spanish American and 2 from American Indian backgrounds. Approximately 44% of the Southeastern students come from economically disadvantaged homes and receive federally subsidized lunches and other benefits through private, local funding sources. Approximately 45% of Southeastern students score sufficiently below grade level to qualify for Title I assistance.

PRODUCT OBJECTIVE NUMBER I

Objective: "Seventh grade students will display an increased level of positive biracial interaction with members of the opposite race throughout the school year."

Measurement Technique: Five different types of situations were observed (described in Chapter two, page four) using different types of observation and measuring instruments most appropriate to the specific nature of the situation; however, the over-all objective for observing each situation was the same: To determine the extent of interaction. A statistically significant increase in biracial interaction of all five measures was set as criterion for Southwestern during 1975-76.

I. Level of Attainment

Percentage increases were large enough to create statistical significance, but did not do so because of evaluation design. (See limitations to the study)

II. Answers to the Evaluative Questions

A. Report on Data Collection: Measurements were conducted four times during the school year (September, November, January, and April) by Project staff and classroom teachers. Sociometric questionnaires were given to three seventh grade Social Studies classes at Southwestern and Southeastern for data modules one and two. Three English classes at both schools were measured by observation checklists for module three. The final two modules were measured with a series of scheduled photographs taken of appropriate activities in school and during BACSTOP programming. Southeastern was excluded from data modules four and five. Data module four involved BACSTOP programming of which Southeastern did not have and data module five was a series of candid photos taken of student seating arrangements in the cafeteria. Since seating at Southeastern was on assignment this measure could not be used. For the purpose of this study only the first and

last measures are used, thus providing pre and post data.

B. Presentation of Results: The results of Product Objective One are presented in the following tables.

DATA MODULE ONE

HYPOTHETICAL CHOICE OF A PARTNER TO ENGAGE IN THREE HYPOTHETICAL ACTIVITIES.

TABLE III-19

SOUTHWESTERN				
SOCIOGRAM				
CLASS ROOM	SEPTEMBER - OCTOBER		APRIL - MAY	
	STANDARD SCORE	RATIO	STANDARD SCORE	RATIO
C-2	26.31	5/19	46.67	7/15
C-4	54.17	13/24	72.72	16/22
C-5	45.45	10/22	46.15	6/13
	$\bar{x}$=41.98	Total Ratio 28/65=43.08	$\bar{x}$=55.18	Total Ratio 29/50=58.0
Amount of Total Increase/Decrease				14.92 Increase
Percent of Increase/Decrease				34.63% Increase
NORTHWESTERN				
	$\bar{x}$=30.24	Total Ratio 47/154=30.5	$\bar{x}$=44.08	Total Ratio 61/142=43.0
Amount of Total Increase/Decrease				12.5 Increase
Percent of Increase/Decrease				41.00% Increase
SOUTHEASTERN				
	$\bar{x}$=45.35	Total Ratio 33/73=45.21	$\bar{x}$=54.92	Total Ratio 35/64=54.69
Amount of Total Increase/Decrease				9.48 Increase
Percent of Increase/Decrease				20.96% Increase

There was consistent increase in the number of biracial choices in all three schools. The BACSTOP schools had gains of 34.63% and 41.0%, respectfully. Southeastern had a gain over initial levels of 20.96%.

DATA MODULE TWO

ACTUAL REQUIRED CHOICES OF SEATING LOCATION DURING INFORMAL ACADEMIC SITUATION UNDER INDIRECT SUPERVISION.

TABLE III-20

SOUTHWESTERN				
PEOPLE PATH				
CLASS ROOM	SEPTEMBER - OCTOBER		APRIL - MAY	
	STANDARD SCORE	RATIO	STANDARD SCORE	RATIO
C-2	33.33	4/12	50.0	2/4
C-4	14.28	2/14	25.0	4/16
C-5	42.85	6/14	100.0	4/4
	$\bar{x}$=30.15	Total Ratio 12/40=30.00	$\bar{x}$=58.33	Total Ratio 10.24=41.67
Amount of Total Increase/Decrease				11.67 Increase
Percent of Increase/Decrease				38.90% Increase
NORTHWESTERN				
	$\bar{x}$=16.97	Total Ratio 22/128=17.19	$\bar{x}$=23.18	Total Ratio 20/86=23.26
Amount of Total Increase/Decrease				6.07 Increase
Percent of Increase/Decrease				35.31% Increase
SOUTHEASTERN				
	$\bar{x}$=45.35	Total Ratio 10/20=50.0	$\bar{x}$=54.92	Total Ratio 14/22=63/64
Amount of Total Increase/Decrease				13.64 Increase
Percent of Increase/Decrease				27.28% Increase

There was consistent increase in the number of biracial choices in all three schools according to this measure. The two BACSTOP schools of Northwestern and Southwestern had the highest percentage increases of 38.90% for Southwestern and 35.31% for Northwestern. The control group at Southeastern experienced a total gain of 27.28% in this measure. Southeastern had very low percentages of minority students in classes that participated in this measure. For example, class A-3rd had only three minority students who always choose students of the opposite race to interact with thus inflating results.

DATA MODULE THREE

ACTUAL REQUIRED CHOICE OF SEATING LOCATION DURING AN INFORMAL ACADEMIC SITUATION UNDER INDIRECT TEACHER SUPERVISION.

TABLE III-21

SOUTHWESTERN				
LIBRARY OBSERVATION				
CLASS ROOM	SEPTEMBER - OCTOBER		APRIL - MAY	
	STANDARD SCORE	RATIO	STANDARD SCORE	RATIO
C-2	60.00	6/10	16.67	1/6
C-4	28.57	4/14	50.00	6/12
C-5	12.50	2/16	33.33	2/6
	$\bar{x}$=33.69	Total Ratio 12/40=30.00	$\bar{x}$=33.33	Total Ratio 9/24=37.5
Amount of Total Increase/Decrease				7.5 Increase
Percent of Increase/Decrease				25.0% Increase
NORTHWESTERN				
	$\bar{x}$=25.0	Total Ratio 16/54=29.63	$\bar{x}$=26.79	Total Ratio 12/44=27.27
Amount of Total Increase/Decrease				2.36 Decrease
Percent of Increase/Decrease				7.96% Decrease
SOUTHEASTERN				
	$\bar{x}$=45.0	Total Ratio 42.86	$\bar{x}$=73.34	Total Ratio 16/22=72.73
Amount of Total Increase/Decrease				29.87 Increase
Percent of Increase/Decrease				69.69% Increase

There were increases in the number of biracial choices at the experimental school (Southwestern) and the control school (Southeastern). Northwestern had a decrease in biracial choices that was 7.96% of initial levels. This module consistently records the lowest levels of gain of all the five measures for Product Objective I. The extreme variations in percentages noted at Northwestern for the 1974-75 and the 1975-76 evaluations have put the validity of this measure in question.

DATA MODULE FOUR

NON-ACADEMIC SITUATION IN WHICH STUDENTS COULD VOLUNTARILY INTERACT WITH WHOM THEY WISHED UNDER INDIRECT TEACHER SUPERVISION.

TABLE III-22

SOUTHWESTERN			
SEPTEMBER - OCTOBER			
CAFETERIA PHOTOGRAPHS			
PRE-ACTIVITY		POST-ACTIVITY	
STANDARD SCORE	RATIO	STANDARD SCORE	RATIO
33.33	6/18	37.50	6/16
00.00	0/16	12.5	2/16
62.50	5/8	25.0	2/8
25.00	4/16	10.0	2/20
$\bar{x}$=30.21	Total Ratio 15/58=25.86	$\bar{x}$=21.25	Total Ratio 12/60=20.0
Amount of Total Increase/Decrease			5.86 Decrease
Percent of Increase/Decrease			22.66% Decrease
BUS PHOTOGRAPHS			
00.00	0/6	00.00	0/8
00.00	0/6	00.00	0/7
16.67	1/6	20.00	1/5
00.00	0/8	00.00	0/8
$\bar{x}$= 4.17	Total Ratio 1/26=3.85	$\bar{x}$= 4.00	Total Ratio 1/28=3.6
Amount of Total Increase/Decrease			0.25 Decrease
Percent of Increase/Decrease			6.49% Decrease
RAIL PHOTOGRAPHS			
58.33	7/12	35.29	6/17
22.73	5/22	57.14	8/14
40.0	4/10	40.0	4/10
25.0	4/16	44.44	8/18
$\bar{x}$=36.52	Total Ratio 20/60=33.33	$\bar{x}$=44.22	Total Ratio 26/59=44.07
Amount of Total Increase/Decrease			5.77 Increase
Percent of Increase/Decrease			17.31% Increase

NORTHWESTERN			
CAFETERIA PHOTOGRAPHS			
$\bar{x}$=22.17	Total Ratio 30/132=22.72	$\bar{x}$=21.27	Total Ratio 31/142=21.83
Amount of Total Increase/Decrease			0.11 Decrease
Percent of Increase/Decrease			0.48% Decrease
BUS PHOTOGRAPHS			
$\bar{x}$= 7.90	Total Ratio 6/77=7.79	$\bar{x}$=13.49	Total Ratio 12/88=13.64
Amount of Increase/Decrease			5.85 Increase
Percent of Increase/Decrease			75.09% Increase
RAIL PHOTOGRAPHS			
$\bar{x}$=32.90	Total Ratio 54/166=32.53	$\bar{x}$=43.35	Total Ratio 74/172=43.02
Amount of Total Increase/Decrease			10.49 Increase
Percent of Increase/Decrease			32.24% Increase

TABLE III-23

SOUTHWESTERN			
APRIL - MAY			
CAFETERIA PHOTOGRAPHS			
PRE-ACTIVITY		POST-ACTIVITY	
STANDARD SCORE	RATIO	STANDARD SCORE	RATIO
22.22	4/18	33.33	6/18
50.0	6/12	33.33	4/12
33.33	2/6	66.67	4/6
N/A	N/A	N/A	N/A
$\bar{x}$=35.18	Total Ratio 12/36=33.33	$\bar{x}$=44.44	Total Ratio 14/36=38.89
Amount of Total Increase/Decrease			5.56 Increase
Percent of Increase/Decrease			16.68% Increase
BUS PHOTOGRAPHS			
12.5	1/8	22.22	2/9
00.00	0/8	00.00	0/8
00.00	0/6	16.67	1/6
00.00	0/3	100.00	3/3
$\bar{x}$= 3.13	Total Ratio 1/25=4.0	$\bar{x}$=34.72	Total Ratio 6/26=23.08
Amount of Total Increase/Decrease			19.08 Increase
Percent of Increase/Decrease			77.00% Increase
RAIL PHOTOGRAPHS			
33.33	2/6	100.00	6/6
33.33	4/12	50.0	6/12
43.75	7/16	18.75	3/16
33.33	6/18	38.89	7/18
$\bar{x}$=35.94	Total Ratio 19/52=36.54	$\bar{x}$=51.91	Total Ratio 22/52=42.31
Amount of Total Increase/Decrease			5.77 Increase
Percent of Increase/Decrease			15.79% Increase

NORTHWESTERN			
CAFETERIA PHOTOGRAPHS			
$\bar{x}$=19.53	Total Ratio 23/122=18.85	$\bar{x}$=15.34	Total Ratio 18/118=15.25
Amount of Total Increase/Decrease			3.6 Decrease
Percent of Increase/Decrease			19.09% Decrease
BUS PHOTOGRAPHS			
$\bar{x}$= 3.68	Total Ratio 3/73=4.10	$\bar{x}$=12.47	Total Ratio 10/74=13.51
Amount of Total Increase/Decrease			9.41 Increase
Percent of Increase/Decrease			32.95% Increase
RAIL PHOTOGRAPHS			
$\bar{x}$=32.56	Total Ratio 48/144=33.33	$\bar{x}$=52.86	Total Ratio 78/148=52.70
Amount of Total Increase/Decrease			19.37 Increase
Percent of Increase/Decrease			58.11% Decrease

Southwestern recorded increases in five of the six measures for this module. Increases were larger in the post measures of April and May compared to initial levels in early fall. Northwestern also experienced increases in five of six measures. Since Southeastern was the control group and thus did not participate in any BACSTOP programming, data for this measure is not available.

DATA MODULE FIVE

VOLUNTARY CHOICE OF PARTNERS FOR INTERACTION IN A NON-ACADEMIC, SOCIAL SITUATION UNDER INDIRECT TEACHER SUPERVISION.

TABLE III-24

SOUTHWESTERN			
LUNCH ROOM OBSERVATION			
OCTOBER		MAY	
STANDARD SCORE	RATIO	STANDARD SCORE	RATIO
0	0/19	26.32	5/19
Amount of Total Increase/Decrease			26.32 Increase
Percent of Increase/Decrease			Undefined
NORTHWESTERN			
38.89	7/18	61.11	11/18
Amount of Total Increase/Decrease			22.22 Increase
Percent of Increase/Decrease			57.13% Increase

Both schools showed consistent increases in the amount of interaction of their respective cafeterias. Comparisons cannot be made as Southwestern used tables as the unit of analysis and Northwestern used sections of tables as the unit of analysis.

Southeastern assigned students to seating in their cafeteria, thus making the use of this measure impossible.

C. Interpretation of Results: There were consistent percentage increases in the number of biracial choices in most measures of Product Objective I. The BACSTOP schools of Southwestern and Northwestern experienced gains as did the control groups from Southeastern.

D. Side Effects and Considerations: It should be noted that the percentage increases experienced at Southeastern may not be entirely reliable. Minority enrollment at Southeastern is only 16% as compared to Southwestern, which has 30% and Northwestern, which has over 40% minority enrollment. It has been noticed and generally agreed that the smaller the minority population the greater the amount of integration will be. This was especially visible in classes which participated in the measures of Product Objective I. Two, three and four black students from classes of twenty to twenty-five students were totally assimilated into the

overwhelming majority of white students, thus greatly inflating results.

PRODUCT OBJECTIVE NUMBER II

Objective: Project staff will gather baseline data on the number of negative biracial incidents at Southwestern and Southeastern.

Measurement Technique: Behavioral referrals were monitored by involved school personnel who determined which incidents were negative biracial incidents.

I. Level of Attainment

Baseline data was gathered and is recorded in this evaluation.

II. Answers to Evaluative Questions

A. Report on Data Collection: Every time that an incident resulted in a formal disciplinary referral, that event was potential data for this evaluation. There were several levels of filtering.

1. Was the incident biracial? This simply involved knowing identity of the participants.

2. Was race an issue? That is, was there evidence of racial slur or motivation as part of the event? This was determined by school faculty who handled the referral.

3. Did the incident involve 1) racial or ethnic slur, 2) threat, 3) assault, or, 4) fighting: These four standard categories are used throughout the Battle Creek School system.

4. Did suspension result?

B. Presentation of Results: The results of Product Objective Number II are presented in the following table.

TABLE III-25

		N.W.	S.E.	S.W.
TOTAL SCHOOL	STUDENT SUSPENSIONS RESULTING FROM REFERRALS 7 8 10 11	126	114	58
SEVENTH GRADE ONLY	TOTAL SUSPENSIONS	36	44	19
	SUSPENSIONS INVOLVING TWO RACES	11	13	11
	RACIAL MOTIVATED INCIDENTS	9	11	10

C. Interpretation of Results: Comparisons cannot be made between Northwestern and the other two junior high schools. Northwestern is twice the size of Southwestern and Southeastern. Even so, nine racially motivated incidents recorded by a school that is twice the size of Southwestern that recorded 10, and Southeastern that recorded 11, is promising.

The BACSTOP school of Southwestern had less than half the number of violent incidents; 58 as compared to 114 for Southeastern. Again, at the seventh grade level Southwestern at 19 recorded less than half of Southeastern at 44 for violent related incidents. Racially motivated incidents of both schools were comparable at 10 for Southwestern and 11 for Southeastern.

D. Side Effects and Considerations: While the above statistics are favorable for the BACSTOP schools involved in this evaluation some obvious variables should be mentioned. It is possible that staff at each of the junior high schools report incidents and refer students with varying degrees of consistency. This cannot be proven one way or another, but does in some degree inflict itself upon results.

PRODUCT OBJECTIVE NUMBER III

Objective: Project staff will gather baseline data on the number of incidents in which seventh grade students become involved in the negative violent interracial interactions of other students during the 1975-76 school year, at Southwestern and Southeastern.

Measurement Technique: Project staff and school personnel systematically reviewed office referrals which were recorded in Product Objective II. From these referrals those incidents which involved more than two students were recorded. Staff then carefully examined each incident, gathered data about them, interviewed the participants and witnesses to the incidents, and collected anecdotal information to describe the incidents. After examining all evidence, a determination was made deciding whether each incident was "a negative violent interracial incident which snowballed on the basis of racial lines and allegiance."

I. Level of Attainment

Baseline data were gathered and are included in this evaluation.

II. Answers to Evaluative Questions

A. Report on Data Collection: The data were collected on a weekly basis.

B. Presentation of Results: There were no biracial incidents which involved more than two students at Southwestern or Northwestern. One incident that involved an American Indian, Mexican American, and Spanish American that occurred at Southeastern was unique, but not racially motivated.

C. Interpretation of Results: It appears that "snowballing incidents" or what is more commonly referred to as riots are a thing of the past.

D. Side Effects and Considerations: None other than those already mentioned.

PRODUCT OBJECTIVE NUMBER IV

Objective: Project staff will investigate the academic achievement of seventh grade students during the 1975-76 school year at Southwestern and Southeastern.

Measurement Technique: The California Achievement Test was administered to a random sample of students twice during the year. Pre and post scores will be computed. Procedures will be statistically valid. A statistical increase in the academic achievement above pre test levels is set as criterion for Southwestern for this measure.

I. Level of Attainment

Criterion was achieved according to this measure. When data were submitted to a correlated T-test, increases in scores were significant at the 5.% level at all three schools.

II. Answers to Evaluative Questions

A. Report on Data Collection: It was determined that a 25% sample would be adequate for this measure. Since continued testing of students selected randomly from an alphabetical list presented difficulties in testing, a new method of selection was used. The randomly selected classes (non-elective) were used. These students were assigned by computer to mandatory classes.

Form A of the California Achievement Test was administered in early November and again in mid May. Data were treated as if a full seven months had elapsed.

B. Presentation of Results: The results are shown in the following table:

TABLE III-26

DATE TESTED	NO. OF ST.			SCHOOL		
	NW	SE	SW	N.W.	S.E.	S.W.
NOV.	56	34	31	6.2	5.9	6.2
MAY	56	34	31	6.9	6.3	7.2
PER MONTH GAIN				1.0	0.57	1.14
PERCENTAGE OF INCREASE				11.3%	6.8%	12.5%

C. Interpretation of Results: BACSTOP students at Northwestern and Southwestern experienced above average growth. Southwestern recorded higher gains with a per month gain of 1.14 with Northwestern slightly behind at a per month gain of 1.0.

D. Side Effects and Considerations: None noticed or relevant.

SUMMARY OF CHAPTER III

A summary of the level of attainment of Parts I and II is necessary for subsequent clarification.

1. There was consistent increase in positive biracial interaction at target and experimental schools.

2. The low level of racially motivated violent incidents at the target school was maintained and improved upon. A lower level of racially motivated incidents was recorded at the experimental school over the control group.

3. Baseline data on "snowballing" incidents which were racially motivated was collected. The incidents at all three schools was almost zero.

4. Data on academic achievement was collected. Not only did both BACSTOP schools experience no depressing effect on academic achievement, by attending BACSTOP, but both the target school and experimental school exceeded average rates of growth.

5. Process objectives were attained; the BACSTOP activities were planned and implemented as required.

CHAPTER FOUR

JUDGEMENTS OF WORTH

INTRODUCTION & VALUE OF OUTCOMES

In 1970-71, Northwestern Junior High School could be characterized as a school with a chronic problem of biracial separatism, which included frequent dyadic interracial violence. There were additionally frequent cases of conflict in which groups of students aligned themselves according to race. The school was chronically low in academic achievement, below grade level on nationally normed achievement tests, and students were falling further behind each year. Staff reports from those years indicated that parent and teacher morale was low and suspicion that the school was not meeting its educational goals was high. There was reason to believe that the interracial conflict within the school contributed to the low morale and affected the ability of the school to meet its academic goals. The composite subjective picture of the school was unflattering.

By the end of the 1975-76 school year, Northwestern Junior High School and Southwestern Junior High School presented a more positive profile. There was a higher level of positive biracial interaction among seventh grade students at Northwestern over levels first recorded in September of 1975. Southwestern experienced even greater gains of positive biracial interaction, up over initial levels recorded in September. The number of racially motivated violent incidents at Northwestern in the seventh grade was only 9, and there were no incidents recorded which involved more than two students. Data collected at Southwestern concerning biracial incidents could not be compared to any previous data, but percentages are low and compare favorably with the control group. Both Northwestern and Southwestern showed strong gains in academic achievement as measured by the California Achievement Test. Rate of achievement exceeded the district rate of achievement and each seventh grade BACSTOP class exceeded its own previous rate of achievement. These descriptions of Northwestern and Southwestern reflect an increasingly positive environment at both schools which has been substantiated in the 1975-76 evaluation report.

The BACSTOP Project was implemented to address some of the negative problems facing the school in 1971-72. During the time that BACSTOP has been in operation, changes have been occurring. But, caution is advised for those who are looking for causal relationships between the BACSTOP program and simultaneous changes in the schools. It is not possible to establish a direct relationship between the two. Other social factors could and undoubtedly were occurring in both Battle Creek and the larger social context of public schools, which would promote changes in student behavior in any school. Without measuring these factors, or controlling for them, inferences are limited. Furthermore, the evaluation instruments and perspective which was used in 1975-76 were not completely consistent with the types of information gathered in the past three years. This, too, limits the ability to draw firm inferences about the effect of BACSTOP upon the students of Northwestern and Southwestern schools. Nevertheless, attention should be

paid to changes which have taken place at Northwestern during the years in which BACSTOP has been operating. Important changes did begin to occur in 1972-73, which was the first year that BACSTOP activities began. In 1972-73 there were 132 separated incidents of interracial violence in the seventh grade alone. BACSTOP began the following year and at the end of that year, there had been 44 such seventh grade incidents a drop of 66.66%. Also, although no record of the actual number of large group, or "snowballing" incidents were kept during the 1971-72 year, we know that there were several such incidents that year which totally interrupted the academic activities in the school. By comparison, in 1975-76 no such incidents occurred at all.

TABLE IV-1

DATE TESTED	NO. OF ST.			SCHOOL		
	NW	SE	SW	N.W.	S.E.	S.W.
NOV.	56	34	31	6.2	5.9	6.2
MAY	56	34	31	6.9	6.3	7.2
PER MONTH GAIN				1.0%	0.57	1.14
PERCENTAGE OF INCREASE				11.3%	6.8%	12.5%

In considering academic achievement at Northwestern the seventh grade students were performing below the national average in 1971-72. In 1972-73, following the first year of BACSTOP operation, those seventh grade students had achieved 1.1 years of growth. In 1971-72, the seventh grade students were achieving a per/month rate of growth which was only .9 that of the national average as they entered school. In 1972-73 the seventh grade students were achieving a per/month rate of growth which was 1.10 that of the national average. In 1974-75 and 1975-76 the seventh grade students were achieving at least one month of gain for every month of instruction. It is possible to state that during the time that BACSTOP has been in operation, there has been a simultaneous improvement in the rate and amount of academic achievement of the seventh grade students at the school. Correlation cannot be established between these two situations: in other words it is not possible to say that BACSTOP and gains in achievement were directly related. Yet, they did occur at the same time. And it certainly is possible to state that academic achievement in the school was not affected adversely by the fact that students spent a considerable number of days in activities which were not directly academic in nature.

In further study of Table IV-1, above, some interesting information is presented regarding the experimental school (Southwestern), and the control school (Southeastern). Southwestern experienced an even higher per month gain than Northwestern with a post total battery of 7.2 and a per month gain of 1.14. This is even more significant when compared to the control group with the lowest pre and post scores and a per month gain of 0.57 percent. Results from previous years for comparative studies were not available. However, strong inferences about the impact of BACSTOP on academic achievement can be drawn by comparing the experimental and control groups. Correlation cannot be directly established but, again, academic gain did occur in a most impressive way.

With all evidence considered, a number of things can be stated about the presence of the BACSTOP program: There is a notable parallel between the presence of BACSTOP and a drop in the level of interracial violence at Northwestern. There is strong evidence that during the implementation of the program, a worthwhile level of positive biracial interaction occurs. There is no evidence to suggest that the operation of such a program adversely affects academic achievement; in fact, the program appears to be related to positive gains. Certainly, many positive changes have occurred at Northwestern since BACSTOP has been implemented and Southwestern is also experiencing some correlating positive change during its first year of BACSTOP.

RELEVANCE OF OBJECTIVES TO NEEDS

The needs paraphrased from the first page of this chapter were concerned with:

1. faculty attention to keeping order and consequent lack of attention to teaching
2. student violence, low achievement, with resulting parental concern
3. a general pattern of racial separation in the school

Northwestern was preoccupied with biracial strife, and academic growth was below national norms. The need was to reverse this trend by halting interracial conflict and violence. The BACSTOP project has three related goals, 1) to reduce negative biracial interaction, 2) increase positive biracial interaction and, 3) increase academic achievement.

The four BACSTOP product objectives constitute a reasonable operationalizing of these goals. These objectives are:

1. to increase the level of positive biracial interaction
2. to maintain the present low level of racially motivated violence
3. to maintain the present low level of "snowballing" in biracial incidents
4. to increase the level of academic achievement

Data collected regarding the four product objectives are highly supportive of a strong BACSTOP impact.

In general, the objectives are appropriate in the light of the needs. The objectives are good operationalizations of the goals, and the goals are direct and adequate statements of response to the needs as initially determined in the 1971-72 school year. Further, the specific objectives for the 1975-76 school year also responded to the emerging need for data describing the level of success of the BACSTOP program.

LIMITATIONS OF THE STUDY

Product Objective One

The design of the 1974-75, 1975-76 evaluation lends itself well to showing percentage increases/decreases simply because it was formulated that way. It does not lend itself to showing statistical significance. There are two probable reasons why this is so. First, the sample sizes were too small. Entire classes of 25 students or more represented only one subject in statistical treatment of data. Logically, there should have been 75 to 100 subjects for statistical reliability. Secondly, the scoring method of ratios or standard scores allowed the results to vary to extremes. The range was, in fact, from 0 to 100. Also, some students made several biracial choices, but only the first was counted.

An example in point of a more credible design is the CAT (California Achievement Test) scores. The sample sizes range from 31 to 56 and the scores from 2 to 13. The percentage increases ranged from 6% to 12% and were significant at the 0.0% levels. In contrast, equivalent percentage increases of Product Objective One were not significant at even a 20.0% level.

It seems logical to infer that with the increases shown in Product Objective I statistical significance could have been obtained with a more adequate evaluation design.

APPENDIX

This survey will help to measure some of your ideas and feelings about school. It is like the political polls which ask people who they would like to have as President. It's short, so that you will have time to think carefully about your choices. Just fill in the blanks.

1. My name is _____.
2. My Social Studies teacher is _____

   and we meet period _____.
3. My favorite class is _____.
4. The other country I would like to visit most is _____.
5. If I were choosing two people from this class to go on a camping trip with, I would choose:

   _____

   _____.
6. The TV character who is most like me is _____.
7. If I was invited to a party and was told that I could invite two other people from this class, I would choose:

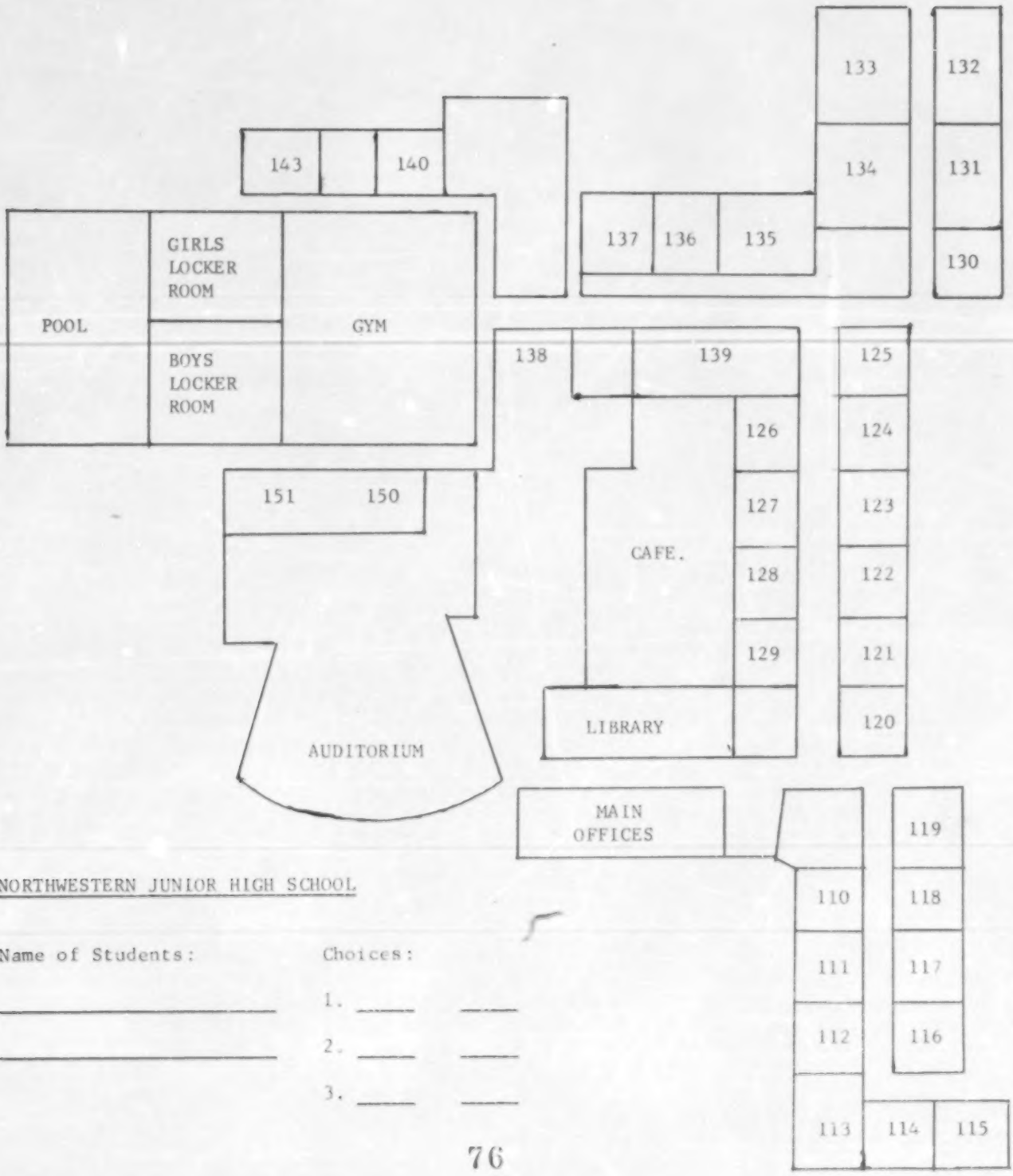
   _____

   _____.
8. The thing I like best about school is _____.
9. If I were choosing two partners from this class to work on an important homework assignment with, I would choose:

   _____

   _____.
10. Of all the movies I have seen, the one I liked best was _____

    _____.



NORTHWESTERN JUNIOR HIGH SCHOOL

Name of Students:

Choices:

1. _____ _____

2. _____ _____

3. _____ _____

VOLUNTARY INTERACTION CHECKLIST

ACTIVITY_____ DATE_____ GROUP_____

CAFETERIA SEATING	PRE	POST
Number of blacks present	____	____
Number of whites present	____	____
Maximum possible number of biracial dyads	____	____
Actual number of biracial dyads	____	____
Percent actual of number possible	____	____
BUS SEATING		
Number of seats occupied	____	____
Maximum number of potentially integrated seats	____	____
Number of actually integrated seats	____	____
Percent actual of number possible	____	____
RAIL SEATING		
Number of blacks present	____	____
Number of whites present	____	____
Maximum possible number of biracial dyads	____	____
Actual number of biracial dyads	____	____
Percent actual of number possible	____	____

TOTAL CELL_____

TOTAL PRE_____

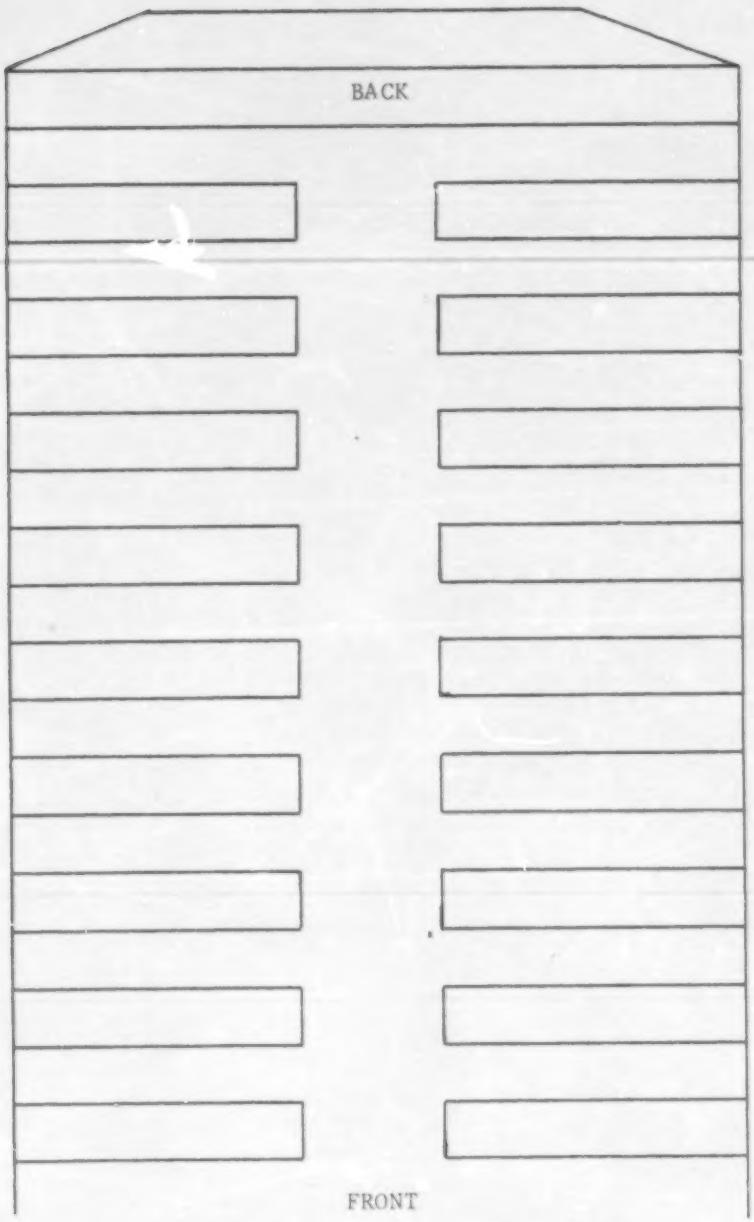
TOTAL POST_____

ACTIVITY_____

DATE_____

GROUP_____

BUS



78

BACSTOP

LUNCHROOM ANALYSIS

PERIOD_____

DATE___/___/___

CAFETERIA SECTION

3	2	1
4	5	6

67

LEGEND

TABLE OF BLACKS ONLY..... B
TABLE OF WHITES ONLY..... W
MIXED TABLE..... M
EMPTY TABLE..... E
SPECIAL ED. TABLE..... SP. ED.

SECTION TWO

B	B	B	W	W
B	B	W	W	E
B	B	B	B	W

LIBRARY OBSERVATION CHECKLIST

DATE_____ TEACHER_____ HOUR_____

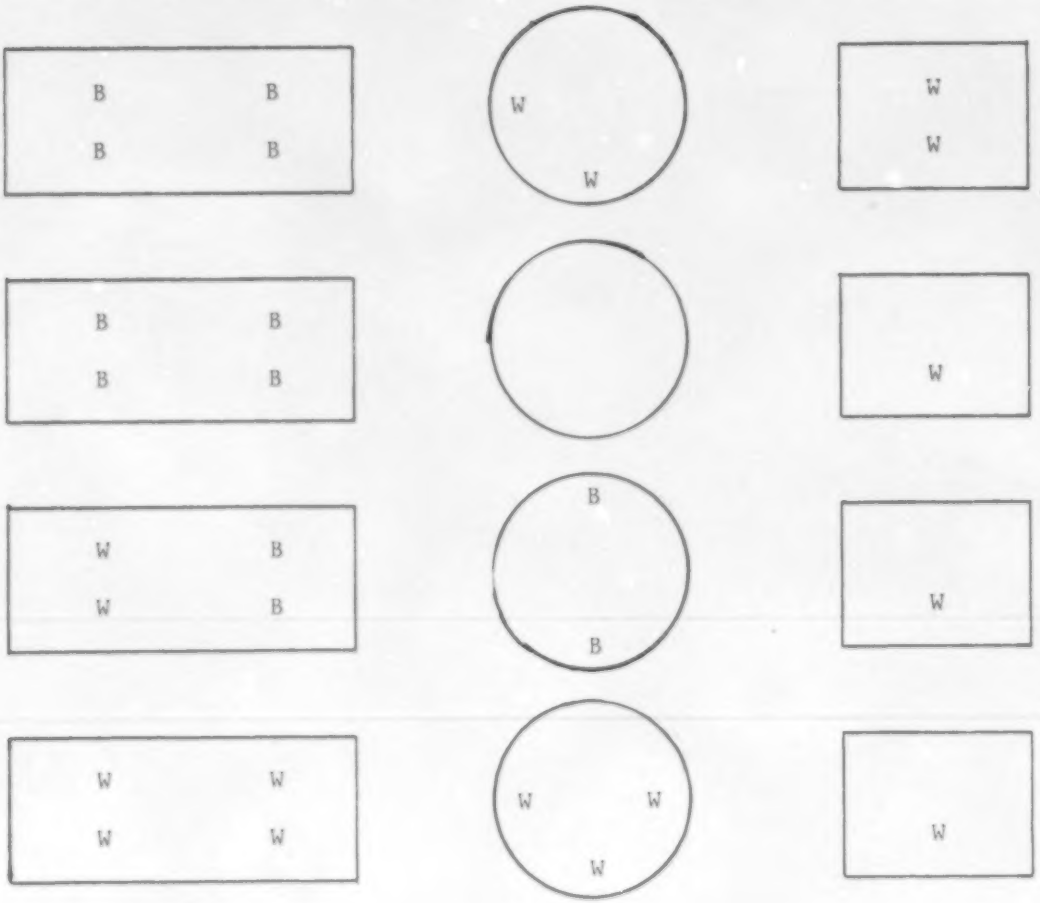
Number of blacks present _____

Number of whites present _____

Maximum possible number of biracial interaction _____

Percent actual of number possible _____

DIAGRAM IN SPACE BELOW ANY INTEGRATED TABLE USING B FOR BLACK AND W FOR WHITE WHEN INDICATING SEATING ARRANGEMENTS



TO: Northwestern Staff

FROM: Lee Snooks

RE: Racially Related Referrals

For the purpose of keeping an accurate record of the number of racially related referrals during the 1975-76 school year, I have developed a procedure which I am asking you to adopt and follow.

1. Refer all student problems through normal channels.

2. Whenever there is a referral involving a black student and a white student who are in conflict with each other, please send me a copy of the referral, in addition to the grade principal.

3. I will contact you for a follow-up on such an incident.

Please use the following in determining whether an incident is racial. If you are in doubt, please consult with me.

Generally speaking, a racial incident is:

1. Two or more students representing both black and white backgrounds becoming physically or verbally involved in a disagreement <u>because of race.</u>

   <u>Example</u>: Two students, one black and the other white, arguing about the possession of an object (book, pencil, food, etc.), and becoming verbally aggressive to the point of being physical. The issue seems to fade into insignificance, and it appears that one of the students is trying to get something going, by using the issue. Dialogue is characterized by threats and references to color or race.

2. Two or more students of the same racial background becoming physically or verbally involved in a disagreement <u>because of racial attitudes</u>.

   <u>Example</u>: White student(s) verbally or physically picking on another white student because he has made friends with and associates with a black student.

   <u>Example</u>: Black student(s) verbally or physically picking on another black student because he has been socializing with white students.

3. Students not directly involved in an incident taking sides with those who are involved on the basis of color. Black students supporting the black participant and/or white students supporting the white participant, regardless of the situation.

NORTHWESTERN JUNIOR HIGH SCHOOL
REFERRAL BLANK

Date_____

_____ is referred to _____
Name of Student

Specific Details of Incident:

To Be Filed Only

Not Serious--
Counsel at first
Opportunity

Serious

Very
Serious

Extremely
Serious

Signed_____

Action Taken:

_____Expulsion
_____Suspension
_____Return to class with strong warning
_____Letter sent home
_____Telephone call to parent
_____Teacher conference with parents
_____Other_____
_____

Date_____ _____Signed_____

CORRELATED T-TESTS

CALIFORNIA ACHIEVEMENT TEST

NORTHWESTERN

Var.	Size	Mean	Variance	Standard Deviation
1	56	6.22500=6.2	4.61646	2.14859
2	56	6.86607=6.9	5.70192	2.38787

Sum	Sum of Squares of Observation	Coefficient of Variation	Standard Error of Mean
348.6000	2423.940	34.516	0.2871
384.5000	2953.610	34.778	0.3191

Variance vs. Variance		T-Value	DF	Problem
1	2	-6.535	55	0.000%

SOUTHWESTERN

Variance vs. Variance		T-Value	DF	Problem
1	2	-6.934	30	0.000%

SOUTHEASTERN

Variance vs. Variance		T-Value	DF	Problem
1	2	-3.009	33	0.005%